OIPE JC184
FEB 22 2005
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF	:	John E. Armstrong, et al.
FOR	:	METHODS AND APPARATUS FOR THE INTEROPERABILITY AND MANIPULATION OF DATA IN A COMPUTER NETWORK
SERIAL NO	:	09/836,894
FILED	:	April 17, 2001
EXAMINER	:	Firmin Backer
ART UNIT	:	3621
LAST OFFICE ACTION	:	October 18, 2004
ATTORNEY DOCKET NO.	:	75637/11931

THIS IS A DECLARATION OF MARCIA R. KIRBY PURSUANT TO 37 C.F.R. § 1.131

I, Marcia R. Kirby, hereby declare:

1. I am the named inventor (Marcia R. Armstrong) of the subject matter of U.S. Patent Application 09/836,894 and as such have personal knowledge of its conception, and constructive reduction to practice coupled with diligence from the time of conception.

2. On or before September 7, 2000, I conceived the idea for this invention.

3. On September 7, 2000, I participated in preparing the Product Overview & Detail Specification, attached hereto as Exhibit 1 and incorporated by reference herein. The subject matter of the claims of this application is disclosed in Exhibit, specifically at Section 2.7.4 on pages 35-36 and in several other parts therein.

4. On September 21, 2000, I sent the document labeled Exhibit 1 to our then Patent Attorney's, Baker and Maxham of San Diego, CA. Exhibit 2 is an email I sent to them to begin a key exchange for the transmission of Exhibit 1 to them so that they may prepare a patent application for this invention.

5. After not hearing from Baker and Maxham for a while, on December 4, 2000 I inquired as to the status of our application. Baker and Maxham assured me they were working diligently on the application. An email containing a copy of the response sent by Baker and Maxham as well as a response I sent in response to their response is attached hereto as Exhibit 3.

6. On December 13, 2000, I had a meeting with Baker and Maxham regarding the preparation of the patent application. I sent an email summarizing the tasks to be completed in order for our patent application to be filed. A copy of the email is attached hereto as Exhibit 4.

7. Reviews of the patent application were performed on January 5, 23, 24 and 26, 2001 as evidenced by an email I sent to Baker and Maxham, and others, on January 27, 2001 and attached hereto Exhibit 5.

8. On February 15, 2001, we received a draft of the application from Baker and Maxham containing the current narrative and diagrams. On February 17, 2001 I responded to the draft as evidenced by a copy of an email attached hereto as Exhibit 6.

9. On or before March 12, 2001, I received a draft of the application, without claims. The application was reviewed by the inventors and a response was sent to Baker and Maxham on March 12, 2001. On March 13, I received a message from Baker and Maxham that they were still working on the claims of the invention. Because of the time lapse from the time we first provided documentation to Baker and Maxham, I requested that they provide me with an ETA for completing the application. A copy of an email showing the aforementioned communications is attached hereto as Exhibit 7.

10. On March 27, 2001, because we had not yet received a completed patent application, we terminated Baker and Maxham as our patent attorneys. A copy of the letter of termination is attached hereto as Exhibit 8.

11. Between March 27, 2001 and April 3, 2001 we had been in contact with Arter & Hadden LLP to negotiate the completion of our patent application. On April 3, 2001, we retained Arter & Hadden LLP as our patent attorneys to complete the patent application. A copy of the letter of engagement is attached hereto as Exhibit 9.

12. The patent application was filed by Arter & Hadden LLP on April 17, 2001.

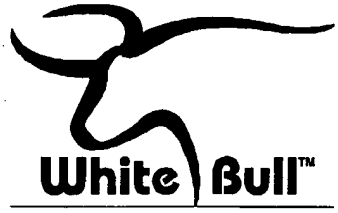
13. Therefore, for the reasons set for herein in paragraphs 1-12, my invention was conceived on September 1, 2000 coupled with due diligence from September 1, 2000 until the filing date of this application, April 17, 2001.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Executed on 2/18/05 at [illegible], CA

Marcia R. Kirby

EXHIBIT
tabbies
1



Product Overview & Detail Specifications

Europa Software, Inc.
White Bull
Product Overview & Detail Specifications

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Prepared by: Europa Software, Inc.
White Bull Development Team
Last Updated: September 7, 2000

Europa Software, Inc.
White Bull
Product Overview & Detail Specifications

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1.1 Mission Statement, Goal and Objectives

Our **Mission** is to provide a client/server eCommerce/EDI solution for the small- to medium-sized business at an affordable price.

1.1 Mission Statement, Goal and Objectives

Our **Goal** is to accomplish our mission in 9 to 12 months using standard methodologies and leading edge technologies.

1.1 Mission Statement, Goal and Objectives

Objectives for accomplishing our goal and completing our mission are:

- Enhance communication business-to-consumer and business-to-business.
- Develop right relationships and strategic partnerships.
- Use existing distribution channels; maximum return for minimum investment.
- Appropriate pricing for customer's business environment.
- Fast & sleek, lean & clean.
- Utilization of best technology throughout all facets of development and operation.
- Apply quality standards of the highest integrity, based on standard practices, and 'Truth in Product' concept.
- Test at all functional and technical levels to prepare product for market, honoring established release criteria.
- Provide an end-to-end solution that is simple, secure and cost effective.
- Utilize standard internet transport protocols as well as open data formats within White Bull standards.
- Implement in a timely manner.
- Develop a solid functional design with product growth in mind.
- Simple to use, easy to implement.
- Quick, error-free development cycle.
- Configurable to client's existing computing environment.
- Develop & implement a Quality Assurance Plan that ensures release of a functionally sound, technically precise product to the general marketplace.
- Develop & establish a world class Help Desk offering flexible, affordable support options.

1.2 Project Scope

Our **Short Term Scope** is to design, develop & distribute the Activation, Sales, Shipping and Accounts Receivable modules for most client/server environments, utilizing our unique i.EDI Protocol (i.EDI) and ANSI X12 standards. National distribution channels are to be utilized.

As a natural growth path, the **Long Term Scope** is to upgrade and distribute the Activation, Sales, Shipping and Accounts Receivable modules applying ANSI EDIFACT standards as applicable to the overseas market. International distribution channels are to be utilized.

2.3 Product Description

White Bull provides an affordable end-to-end solution for small to medium sized businesses to exchange data over the Internet with their Customers, marketing representatives and vendors, regardless of the dissimilar Back Office programs deployed by each. To do this, our Clients will use our proprietary, standard-setting eCommerce software engine. It will be sold as a shrink wrapped product and used on our Clients' servers. It will also be deployed by Application Service Providers (ASPs) on a per use license basis. White Bull enables the automatic exchange of business documents and data in standardized format across the Internet to other business computer systems. It provides the means for Back Office applications to automatically exchange data with disparate applications used by Customers and vendors without the need to manually reenter data. This is done by converting website and common business documents and data such as purchase orders, shipping information, inventory status and accounting data into the ANSI X12 universal standard commonly known as Electronic Data Interchange (EDI). EDI formatted data can be machine read and converted into virtually any native program. White Bull provides full EDI-eCommerce functionality between the Front and Back Office, utilizing standard Open Systems Architecture. Future plans will incorporate the use of the European standards for EDI.

White Bull offers these main advantages to traditional EDI/eCommerce solutions:

- only complete end-to-end solution of it's kind.
- message transmission is more easily accessible and the cost is drastically reduced resulting in cost effective and enhanced Customer service and communication.
- the cost of deploying this eCommerce solution is considerably lower; options for owning or subscribing to services are also provided. Maximizes Return on Investment.
- the small- to medium-sized organization can now participate in eCommerce trading environments which assists in maintaining or gaining a competitive edge in the emerging global market.
- White Bull also provides the large organization a means to automate a larger portion of their trading partner base delivering automation efficiencies to each partner.
- elimination of duplicate data entry and paper handling, thereby improving speed and accuracy.
- this product is configurable to best meet the specific needs of the business organization; communicates with most existing business systems.
- a significant savings in communications expenses over traditional Value Added Networks (VANs) and Virtual Private Networks (VPNs).
- ease of implementation to assure quick time to market.

2.3 Product Description (continued)

Security and Integrity

White Bull offers full security and integrity of information sent across the Internet, including encryption, authentication, content integrity, non-repudiation of origin/receipt and error handling. We are designing and developing our own Internet EDI Protocol (i.EDI) encompassing measures for the content and transmission security needed for eCommerce business transactions. Refer to Section 2.7.2 for further information.

Modular Approach

The White Bull product offers a modular approach to automating eCommerce business. Specifically, the initial modules to be offered are: Activation, Sales, Shipping and Accounts Receivable. This flexibility provides a means of implementing all or some of the modules depending on the Client's business operational needs and budget. A brief description of each module follows.

Activation Module

The Activation Module provides the foundation for the White Bull product and is required for the implementation of any other module. This module initializes Internet communication and establishes common data interchange parameters between servers. Back Office systems are queried and mapped from existing Customer and product data reservoirs to EDI standards.

Sales Module

The Sales Module provides the means for placing product orders and accepting payments via Credit Card, Check or Debit, through 3rd Party Providers, over the Internet. White Bull hands off the financial transaction data to the appropriate financial institution, which in turn moves funds. Compatible with Client's Back Office systems, including QuickBooks, Peachtree, and MYOB by providing the data for Back Office transactions to be recorded. Our coined 'Tote Bag' feature is included in this module as well as an Order Status feature.

Shipping Module

The Shipping Module provides scheduled and historical shipping information from the commerce server to the viewer. Functionally interfaces with commonly used 3rd party shipment tracking systems like UPS and FedEx. A Product Return feature is also included in this module.

Accounts Receivable Module

The Accounts Receivable Module provides acceptance of On Account and C.O.D. payments. Additionally this module reports transactions for all payment methods and supplies the financial and remittance advice data needed for Electronic Funds Transfer (EFT). Following hand off of EFT data, financial institutions move the appropriate funds from payer to payee bank.

2.3 Functional Architecture Overview

Our product offers two solutions for conducting business over the Internet. They are named and described below:

- Business-to-Consumer (B2C)
- Business-to-Business (B2B)

The Business-to-Consumer Bridge provides retail and wholesale Customers with the means to place electronic orders and payments via the Customer Browser through the Client's Web Server, Commerce Server and finally to the Back Office. The 3rd Party Payment Bridge provides payment information to Payment Processing Centers, ie. Cybercash and CHEXpedite, who, in turn generate financial transactions between their processing center and the Client's bank. Additionally, a hand off of shipment information to commonly used Shippers, like FedEx and UPS, who provide shipment tracking is supplied.

The Business-to-Business Bridge provides connectivity options from the Customer's Back Office to the Client's Back Office via a computer with Internet access and the White Bull Plug In. Our plug in consists of the i.EDI communications protocol and transaction mapping mechanisms to electronically format and transmit business documents and information securely over the Internet. We encourage our Client's to be EDI compliant throughout their business systems but do not require compliance.

Both solutions support Customer's purchasing habits and the Client's normal business operation. Our Transaction Mapping feature ensures minimal modification when installing and configuring this product.

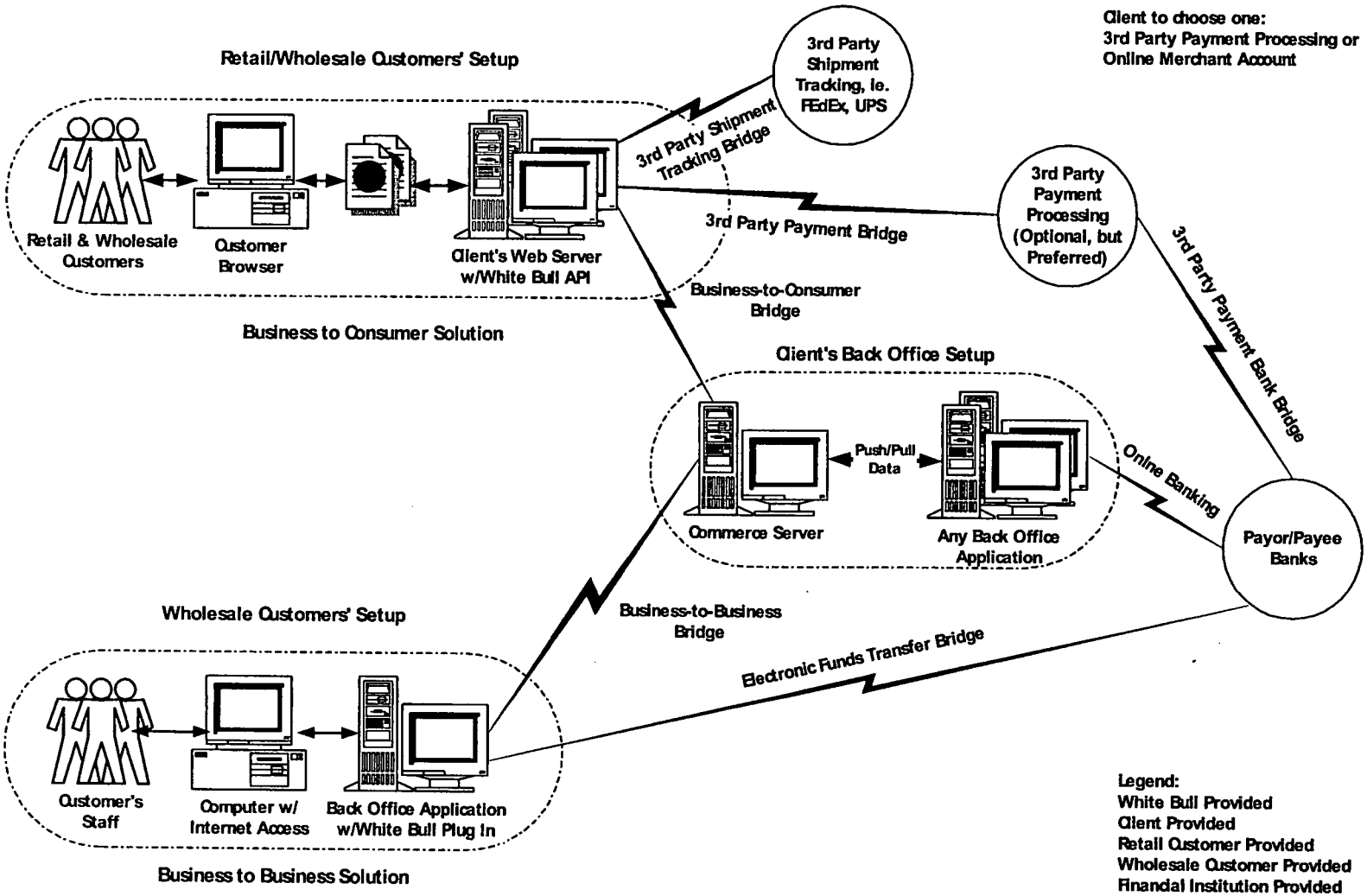
The diagram that follows denotes White Bull's integration into the existing infrastructure for buying and selling products and services over the Internet. Client, Customer and Financial Institution provided components are also annotated.

The White Bull product does not:

- process any Back Office transactions
- directly generate or transmit funds
- directly track shipments

These functions are supplied by the Client's Back Office and those providers who specialize in these types of products and services.

2.3 Functional Architecture Overview

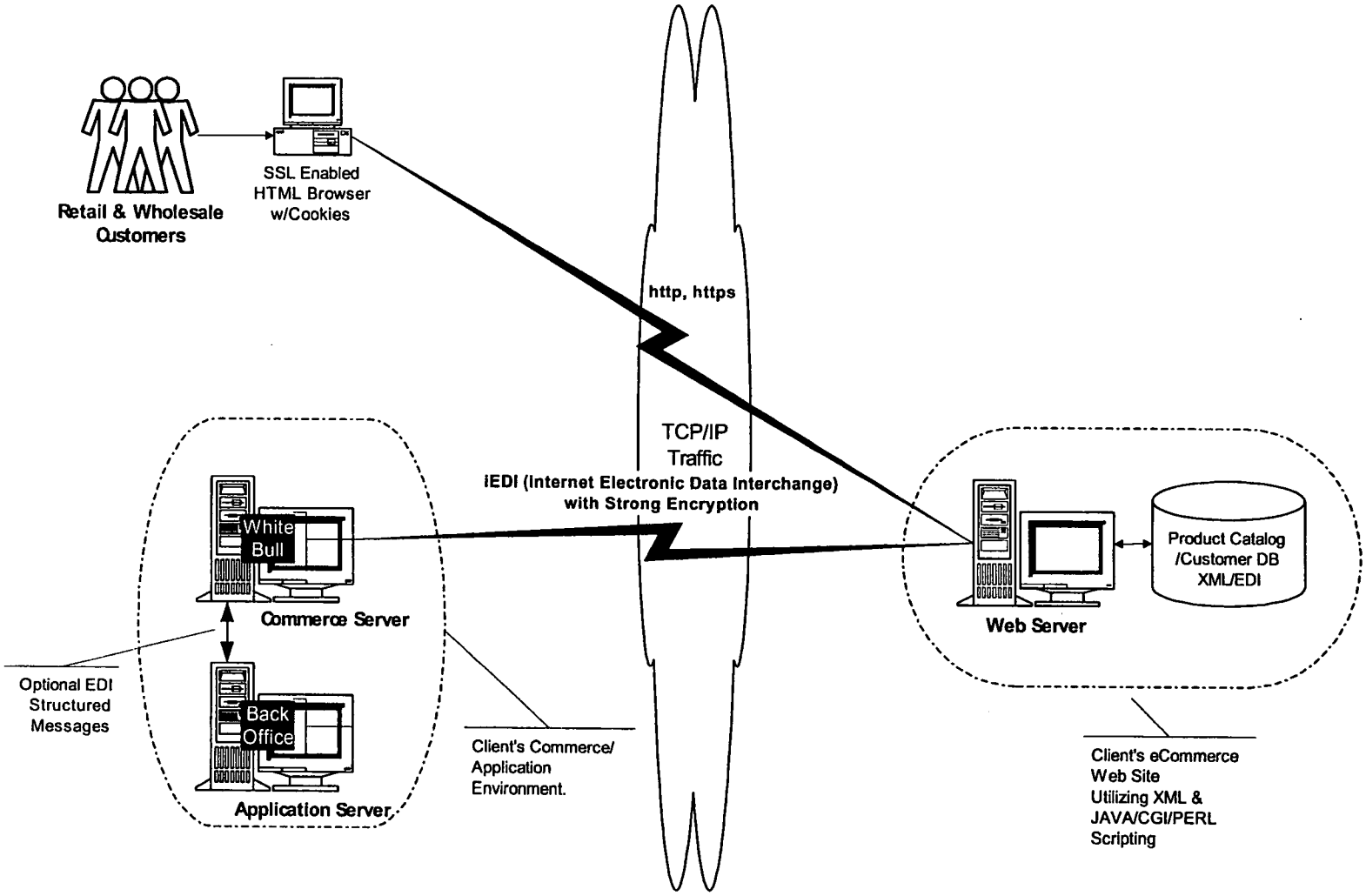


2.3 Technical Architecture Overview – Business-to-Consumer

The Business-to-Consumer option links the Client's Back Office, through the Commerce server, to a web based storefront. The product catalog, including popular shopping features and a simple product category structure, is managed on the Client site at the Commerce server. The Commerce server ensures the website is kept up to date with any changes in either product or Customer data with event driven refreshes. Customer and Product Catalog information is XML formatted and maintained in a Web Server Database for use at the website.

Customers visit the store, pick items to purchase, and buy them using Secure Socket Layer (SSL) browser security. When the Customer is ready to complete the purchase, the website packages the order and sends it to the Commerce server. White Bull incorporates the latest in encryption & signing technologies to ensure the security and integrity of the transmission and data communicated.

2.3 Technical Architecture Overview – Business-to-Consumer

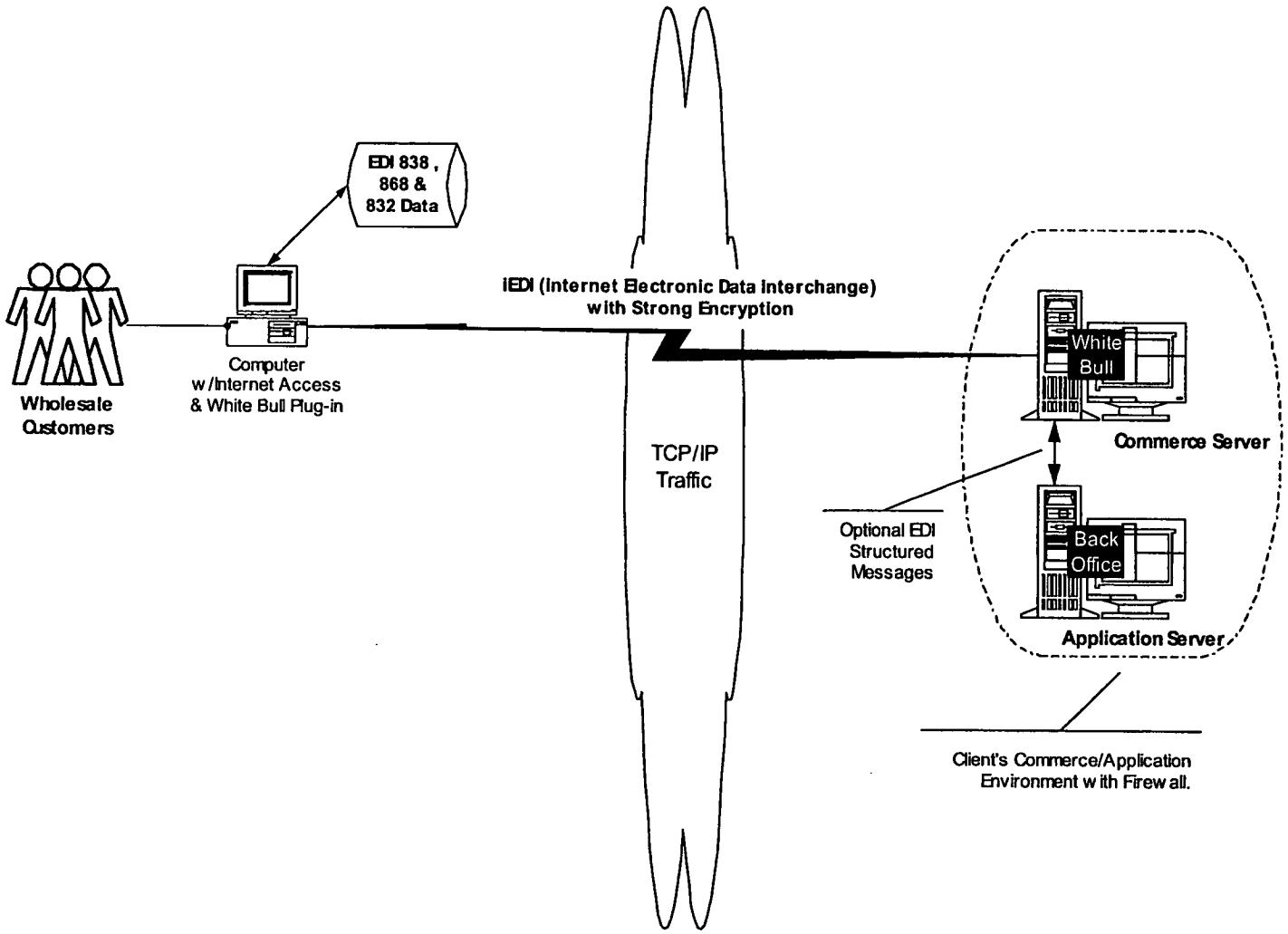


2.5 Technical Architecture Overview – Business-to-Business

The Business-to-Business option utilizes the Client's Back Office link to create an EDI based trading partner interface. Data supplied in standard EDI transactions provides the mapping information needed to automatically link Trading Partner Profiles (EDI 838) and Electronic Form Structures (EDI 868). And, by supplying the Product Catalog (EDI 832), the Client's large volume Customers have an easy method of procuring needed consumables. The White Bull Plug In communicates to the Client's Commerce server using the i.EDI Protocol and incorporates full encryption and signature validating to ensure privacy of information.

A reference to EDI transactions used within the White Bull Product is provided in the Appendices.

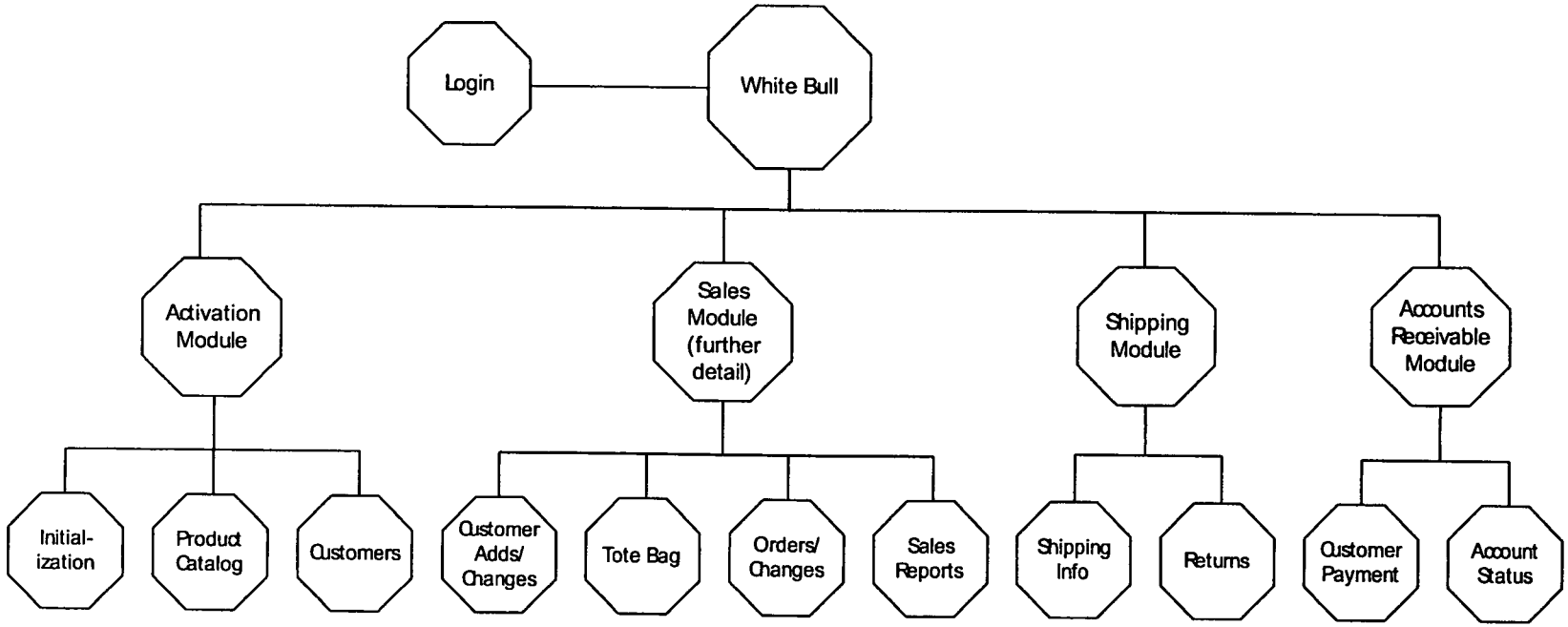
2.5 Technical Architecture Overview – Business-to-Business



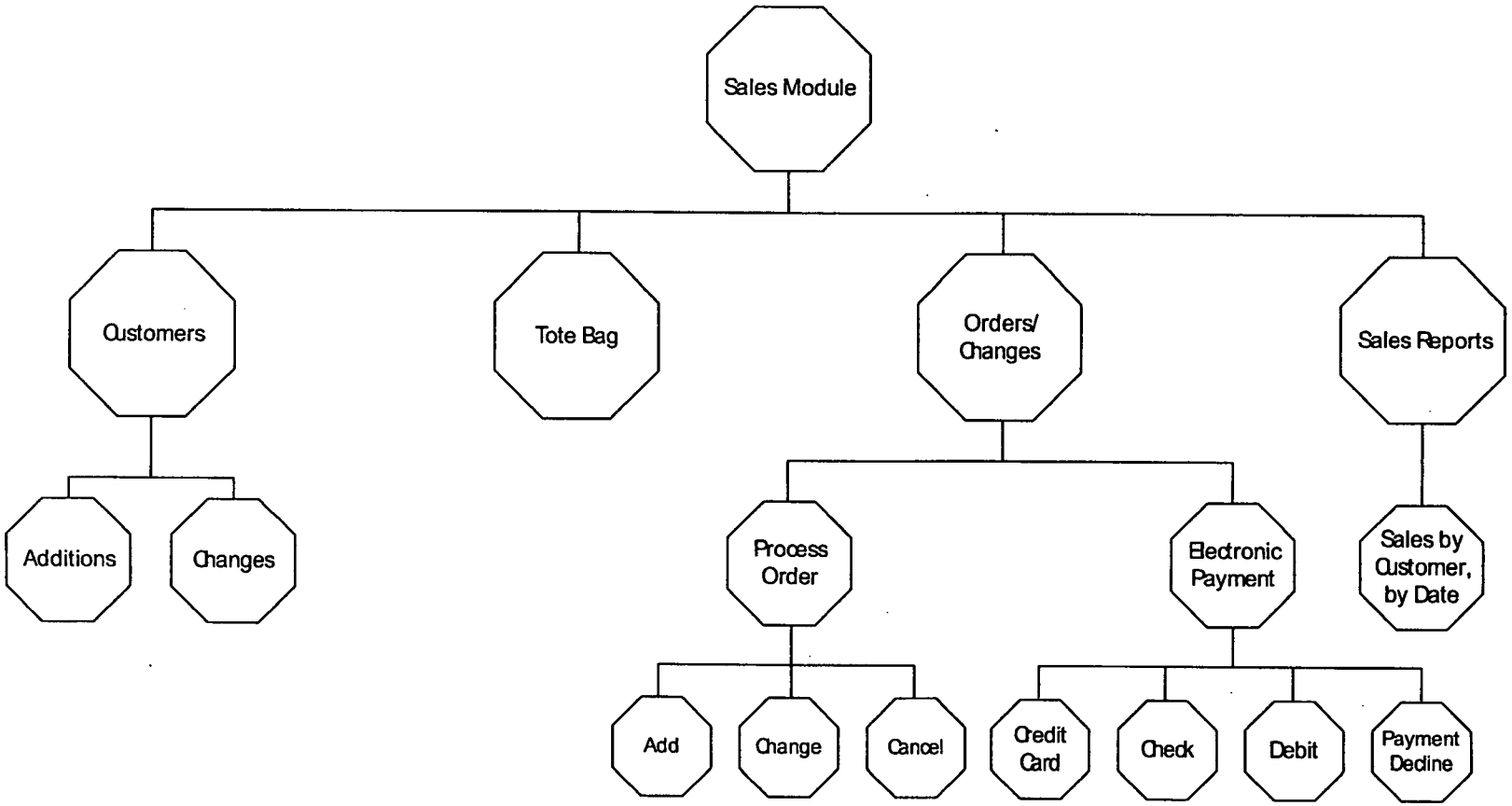
2.5 Functional Application Hierarchy

A simple hierarchy diagram of the White Bull product and it's modules follows on the next few pages. Further description of these components is provided in later sections.

2.5 Functional Application Hierarchy – All Modules



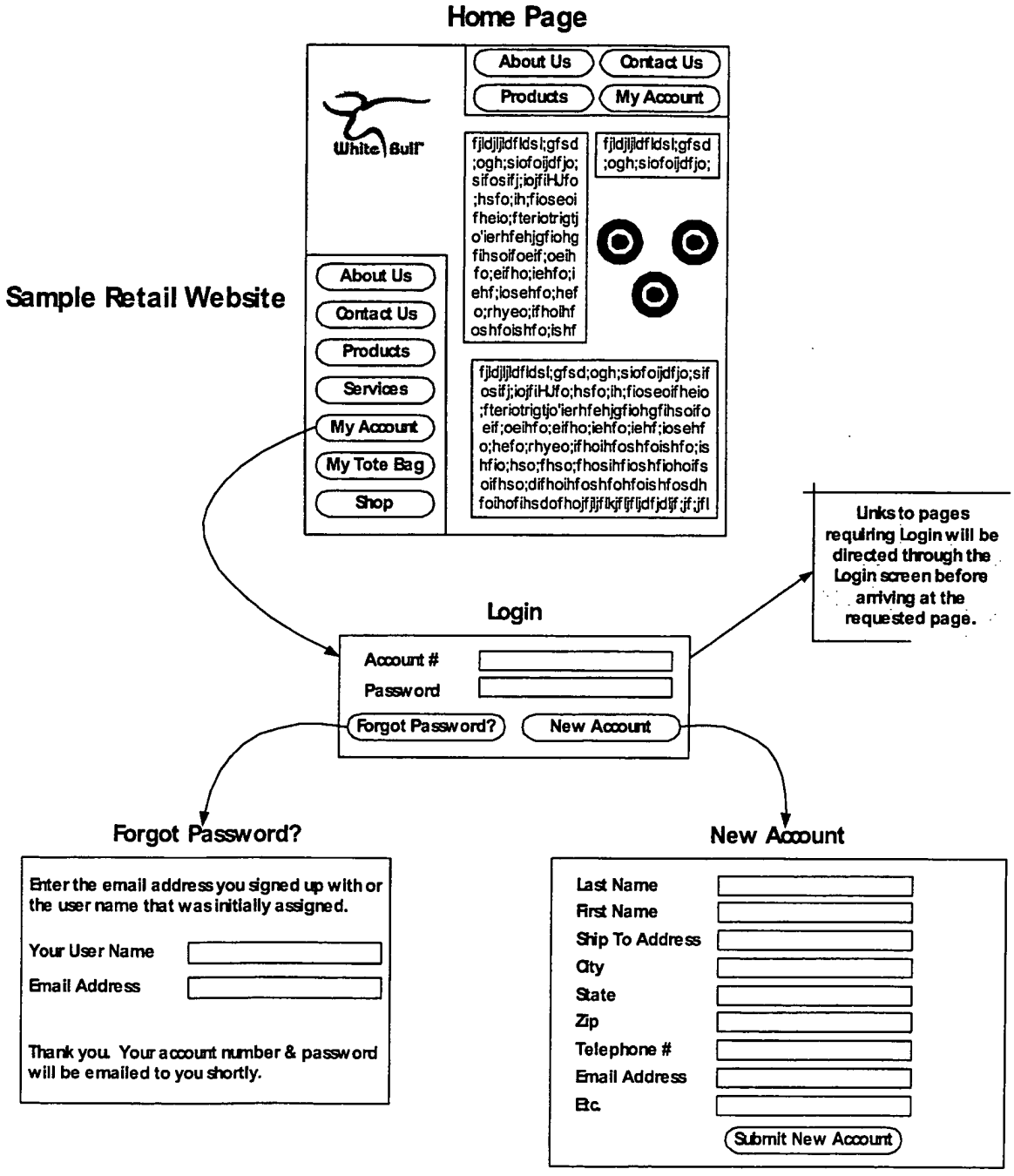
2.5 Functional Application Hierarchy – Sales Module



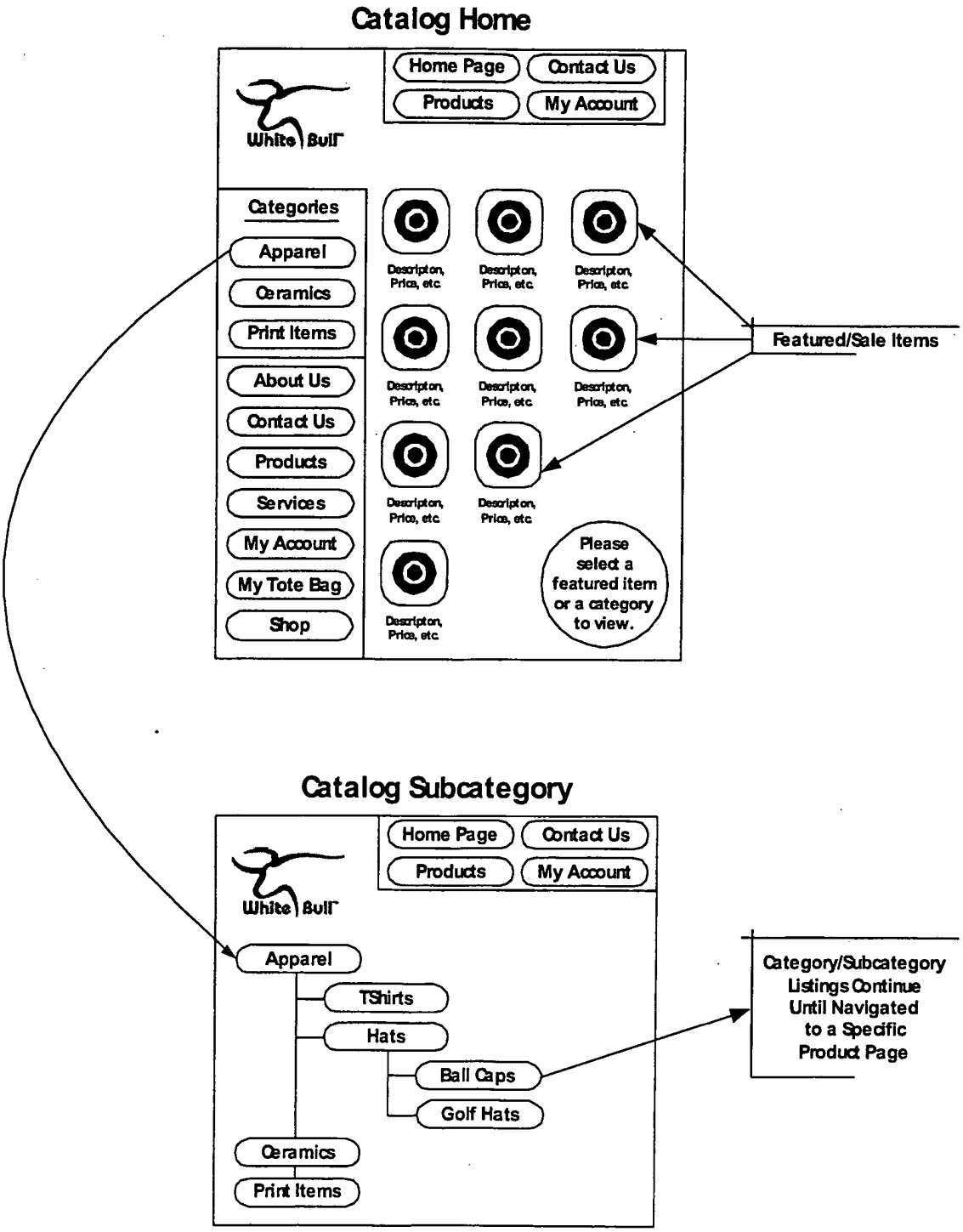
2.5 Website Concept & Design

Conceptual website pages for the Activation Module are presented in this section. The White Bull Development Team is in the process of completing Website Detailed Design.

2.5 Website Concept & Design



2.5 Website Concept & Design



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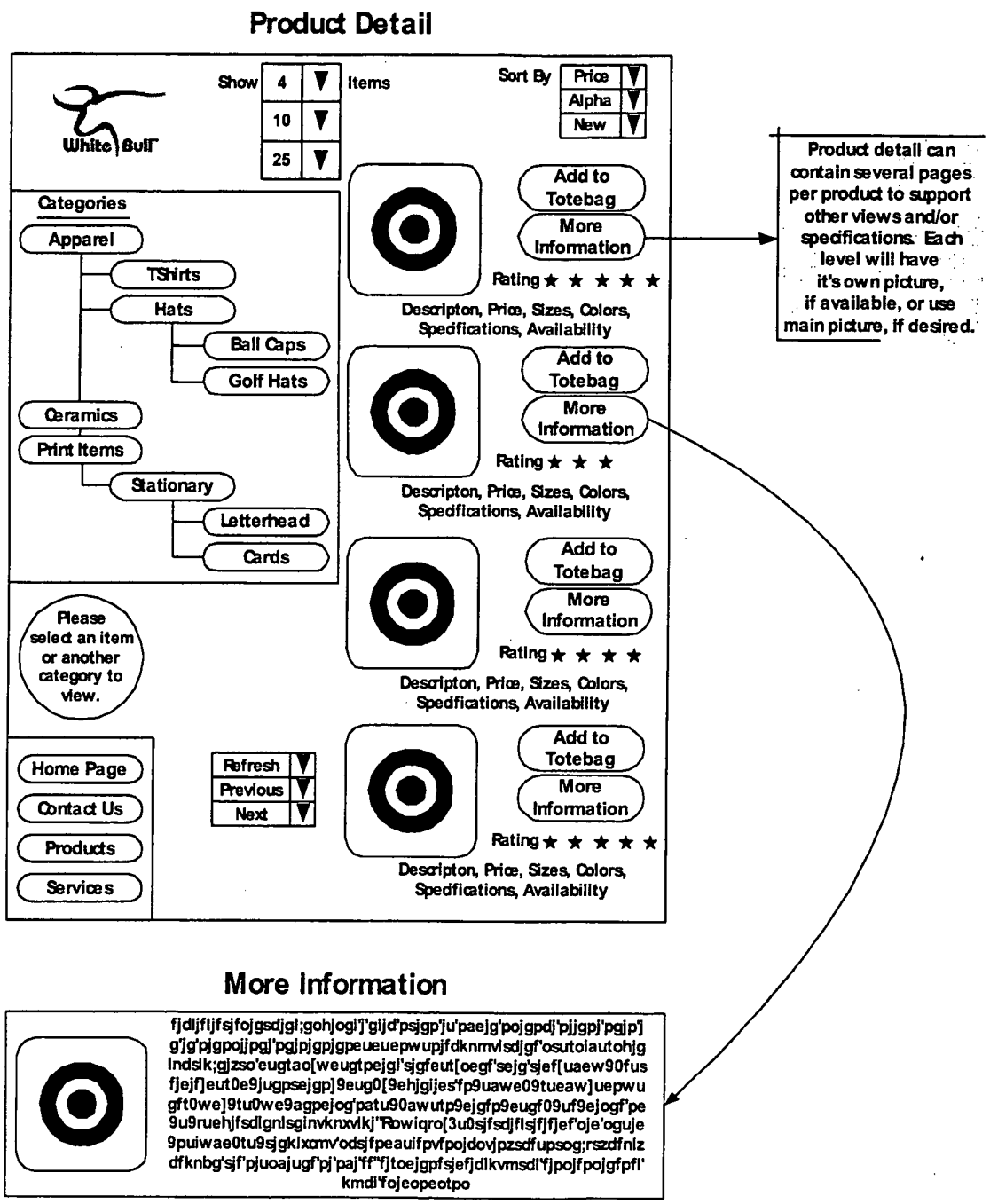
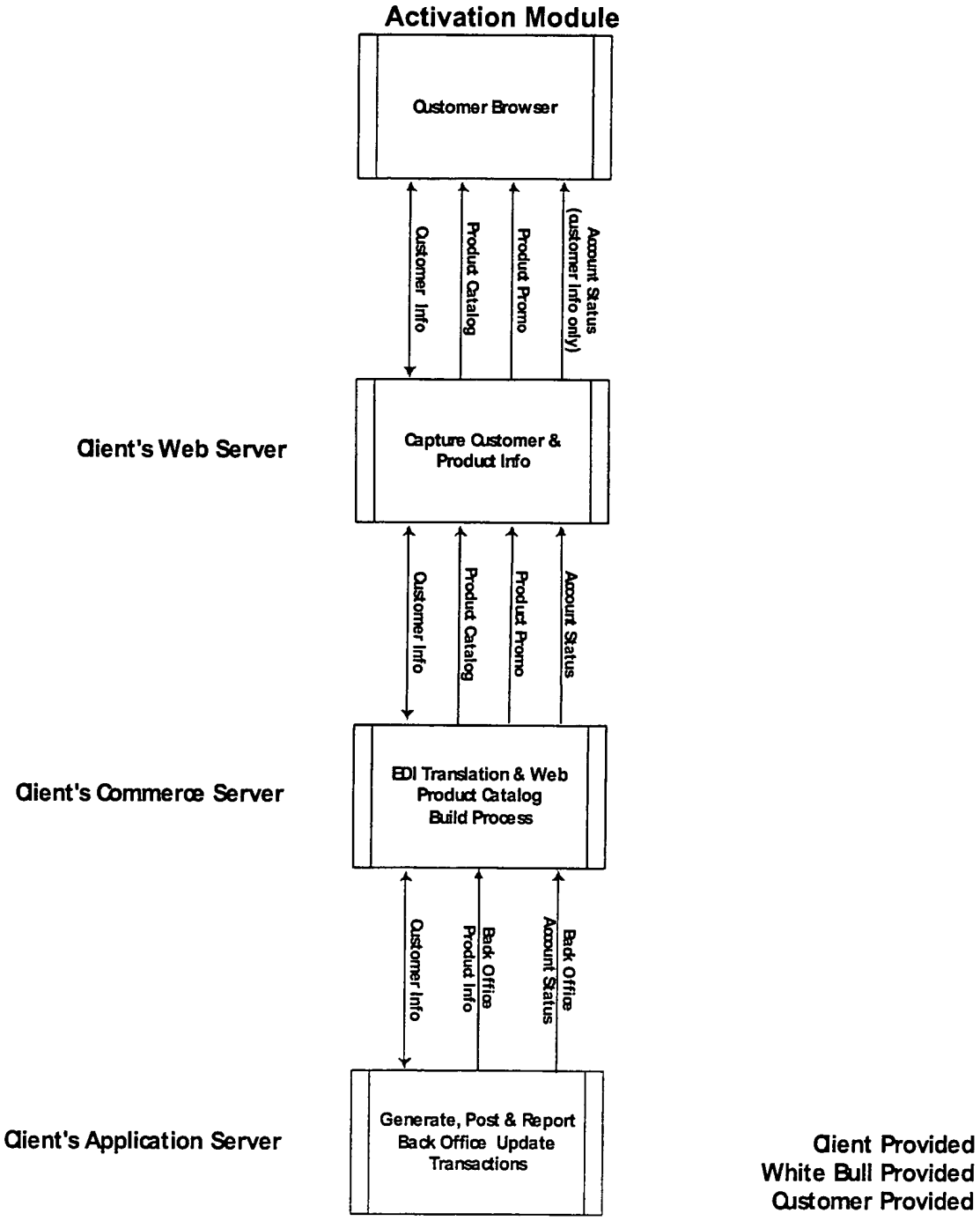


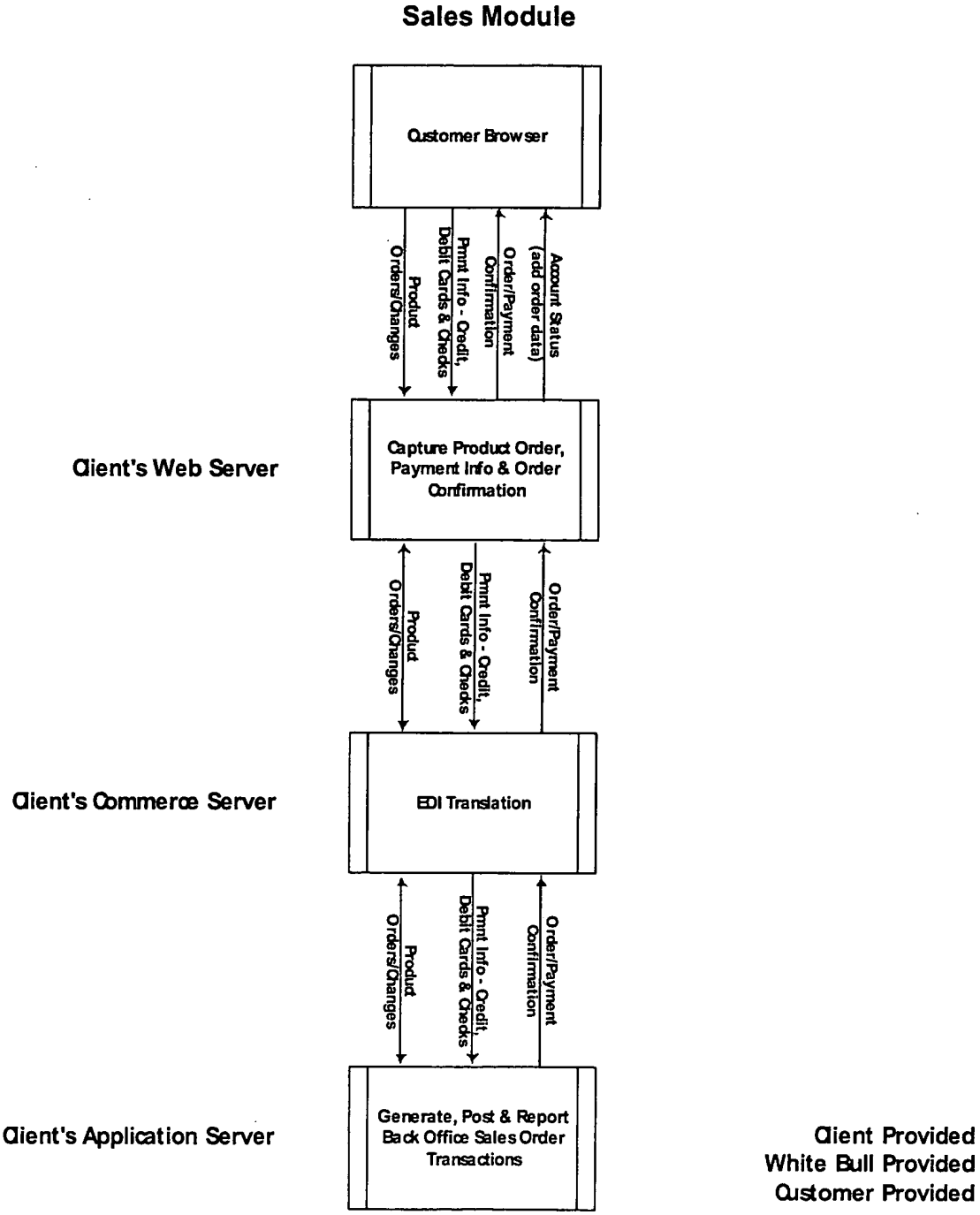
2.6 Functional Process Overview

The Functional Process Overview diagrams that follow depict the flow of information over the various platforms utilized by the White Bull Product. Overviews, by module, are presented for both Business-to-Consumer and Business-to-Business solutions.

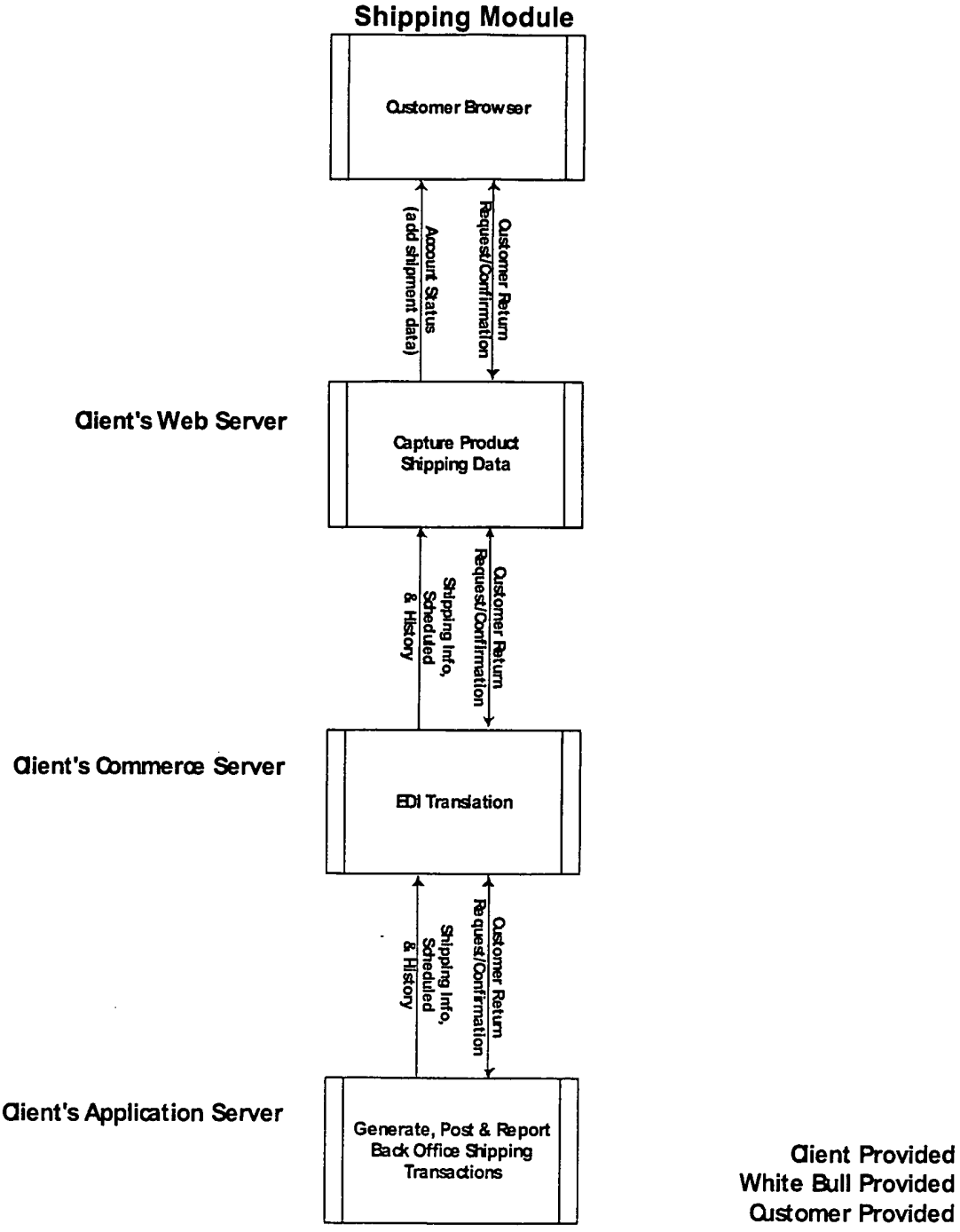
2.6.1 Functional Process Overview – Business-to-Consumer



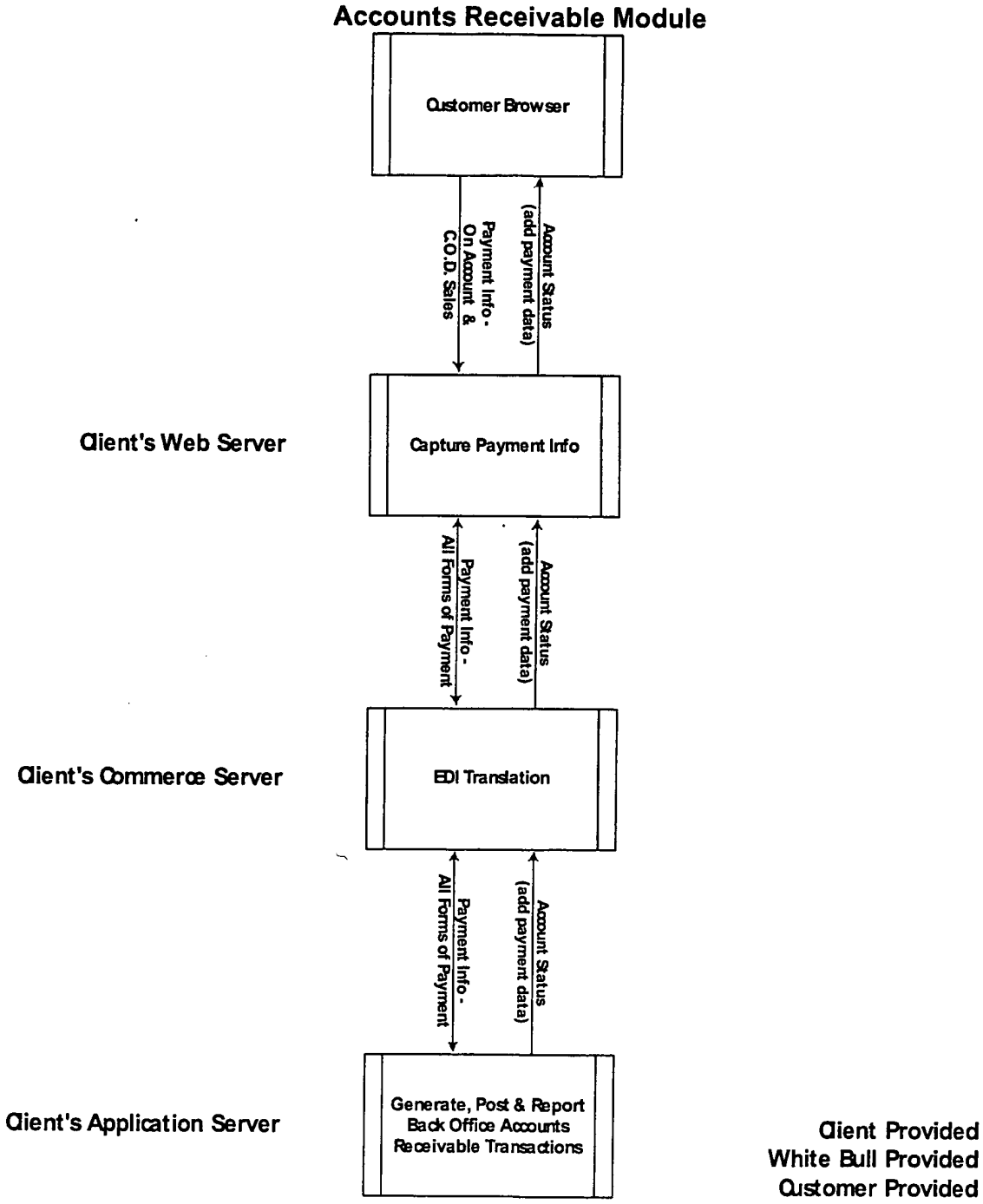
2.6.1 Functional Process Overview – Business-to-Consumer



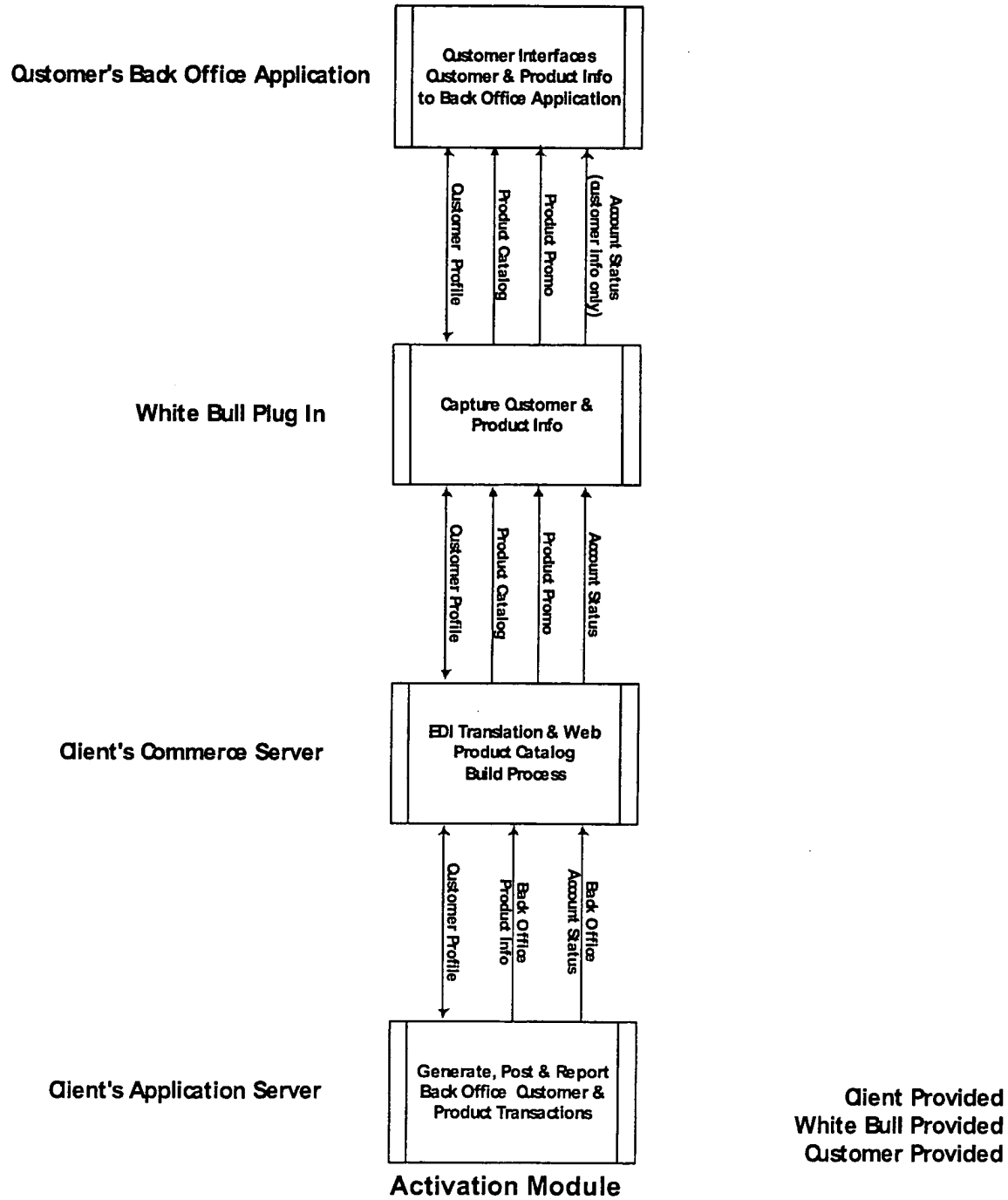
2.6.1 Functional Process Overview – Business-to-Consumer



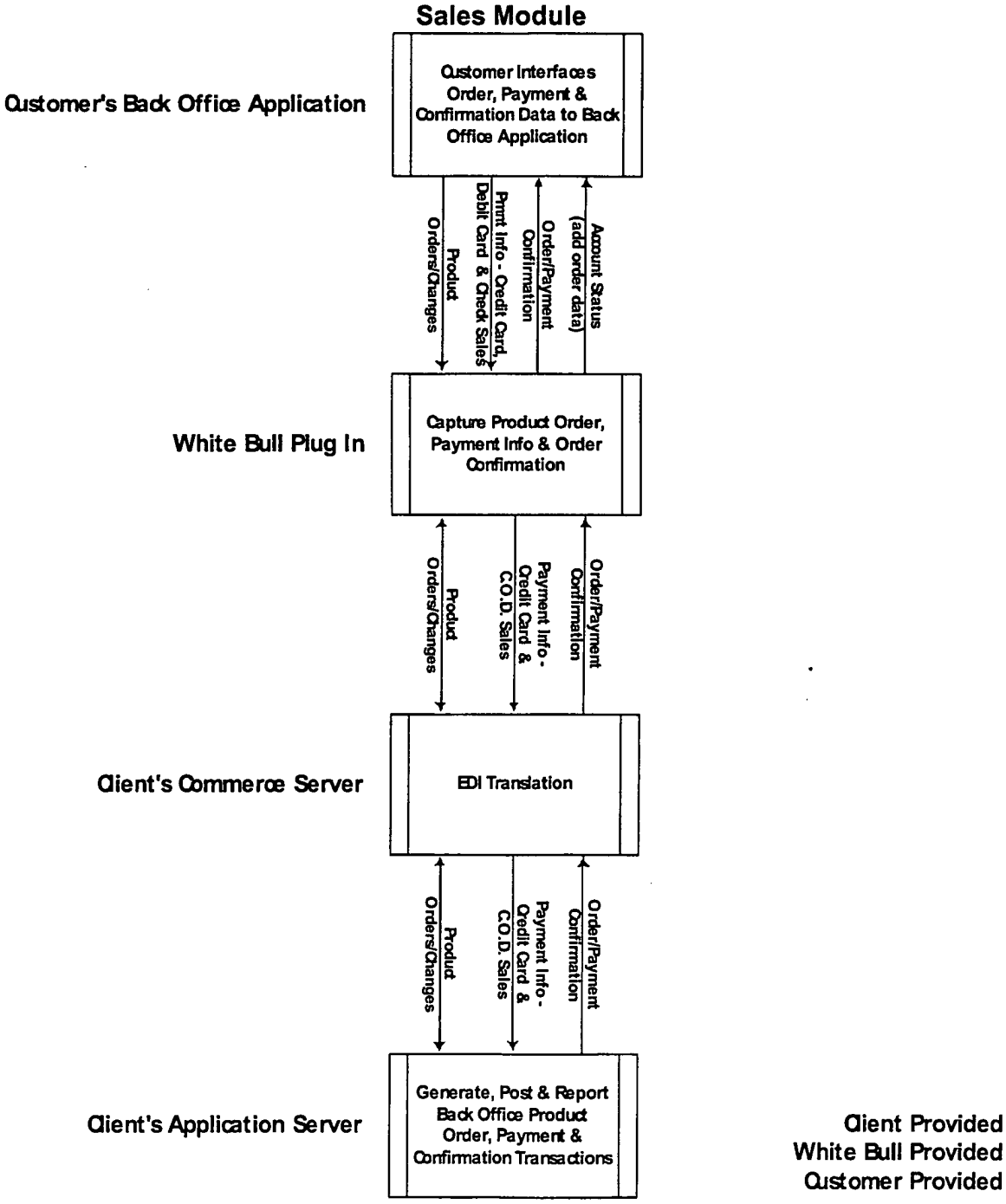
2.6.1 Functional Process Overview – Business-to-Consumer



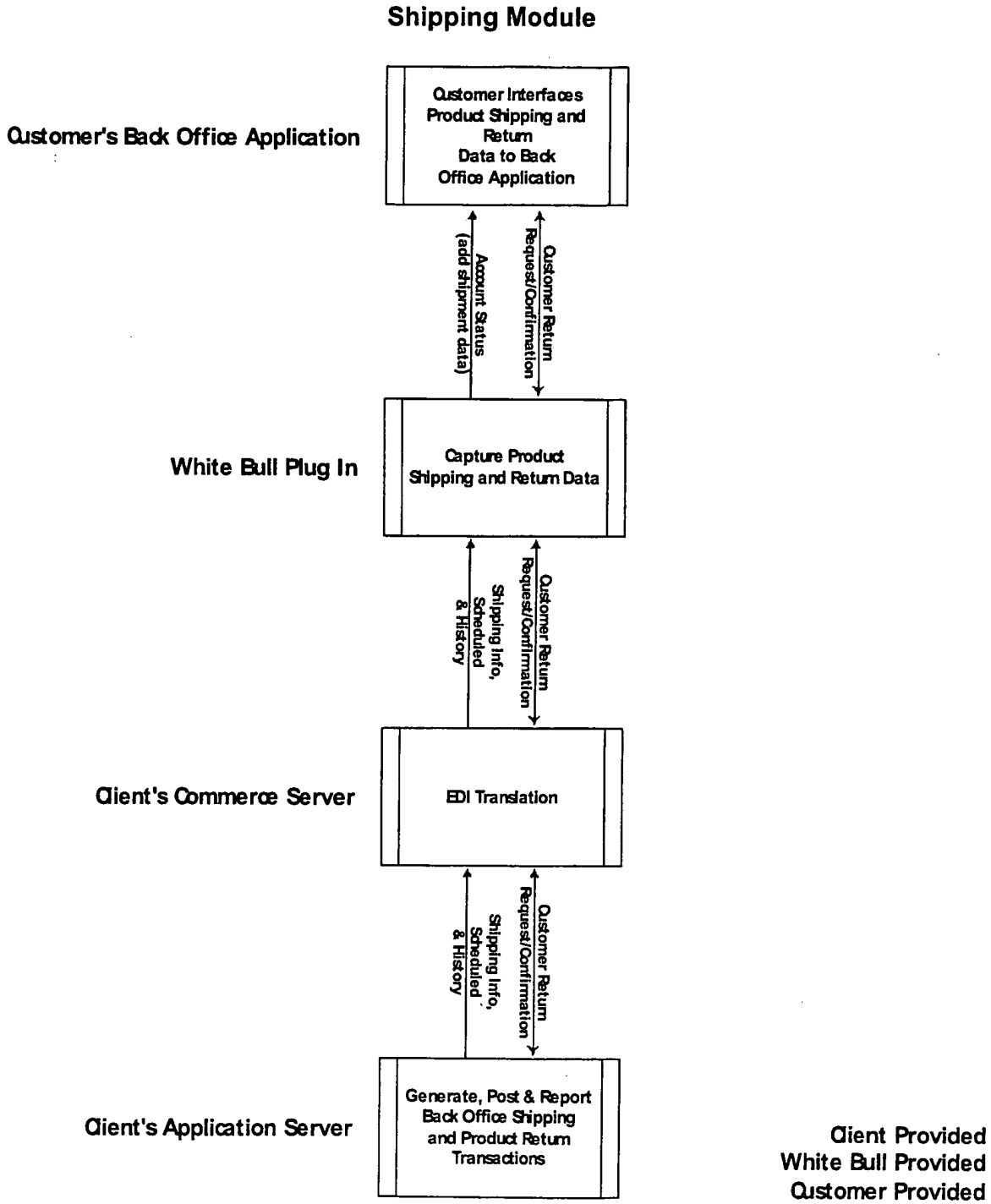
2.6.2 Functional Process Overview – Business-to-Business



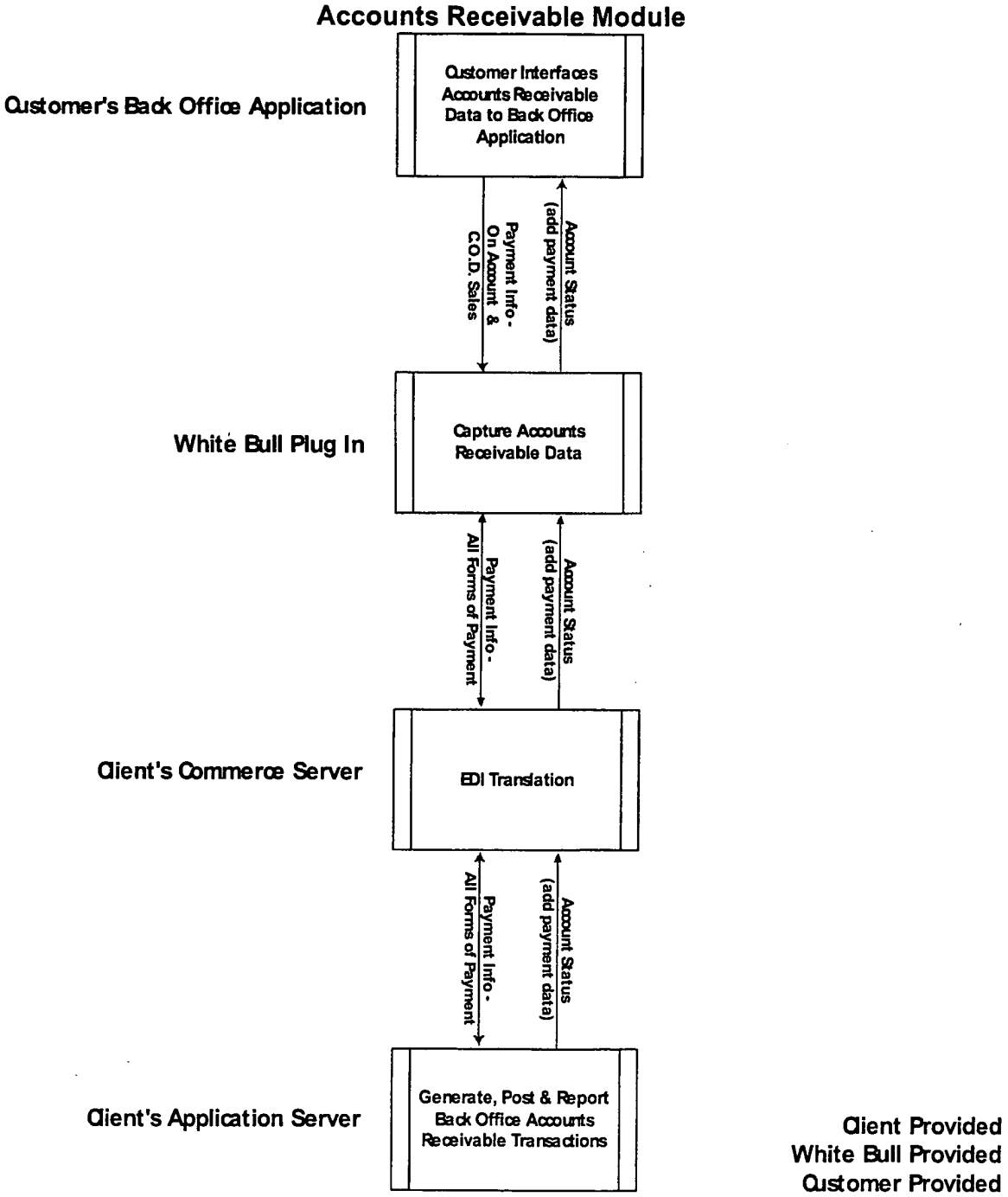
2.6.2 Functional Process Overview – Business-to-Business



2.6.2 Functional Process Overview – Business-to-Business



2.6 Functional Process Overview – Business-to-Business



2.6 Technical Process Overview – Business-to-Consumer

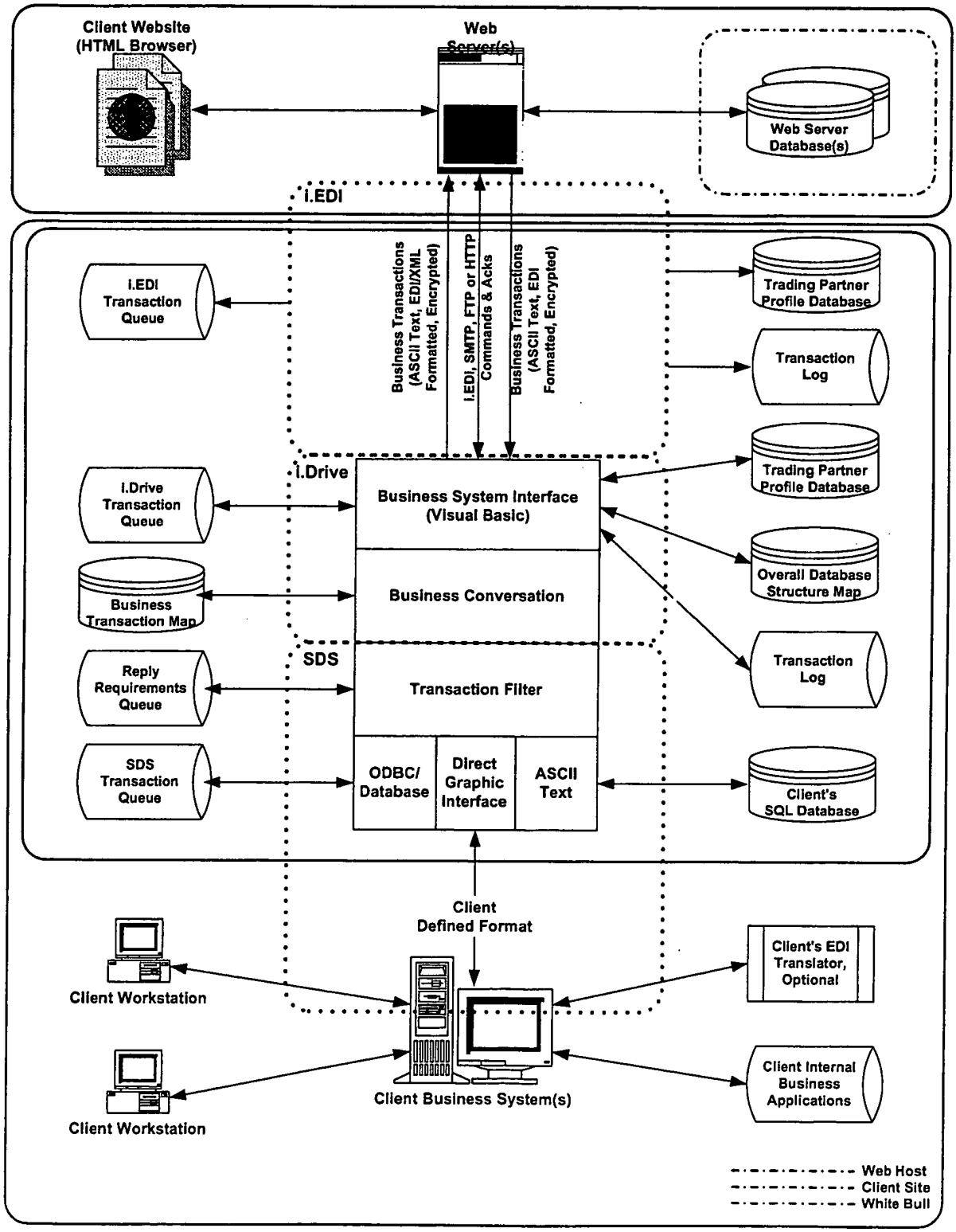
The diagram that follows depicts the various stages a business transaction follows in its path of end-to-end flow. During Activation of the Business-to-Consumer option, the business data is acquired from the Back Office (Customer Information & Product Catalog), formatted through the Transaction Filter into individual XML structured EDI data messages. These packages are sent to the website as replacements of any older packages. They are used by the website to supply data to the "shopping" process without burdening the Commerce server with non-profitable conversations.

Our Internet EDI Protocol (i.EDI) provides a means for secure two-way conversations over the Internet. Information packets transmitted contain messaging and the data contents needed to transact common business transactions electronically between business partners. i.EDI is further defined in Section 2.7.3.

Included in each of the other 3 modules, Sales, Shipping and Accounts Receivable, are methods for updating information packages as status & operating practice change. Customer Orders, and other incoming messages, are routed to the appropriate modules for processing. The message is logged in audit trail and history files, then mapped to the appropriate business method. The message is parsed and injected into the Symbolic Data Stream for presentation to the Back Office.

The Symbolic Data Stream is similar to a mail merge document. The body of the letter is the formatting between the fields used, and the complete letter. The complete letter, in this case, would be just what the Back Office uses to complete the business function. As other modules are implemented, information packages are updated to reflect transaction data specific to that functionality.

2.6 Technical Process Overview – Business-to-Consumer



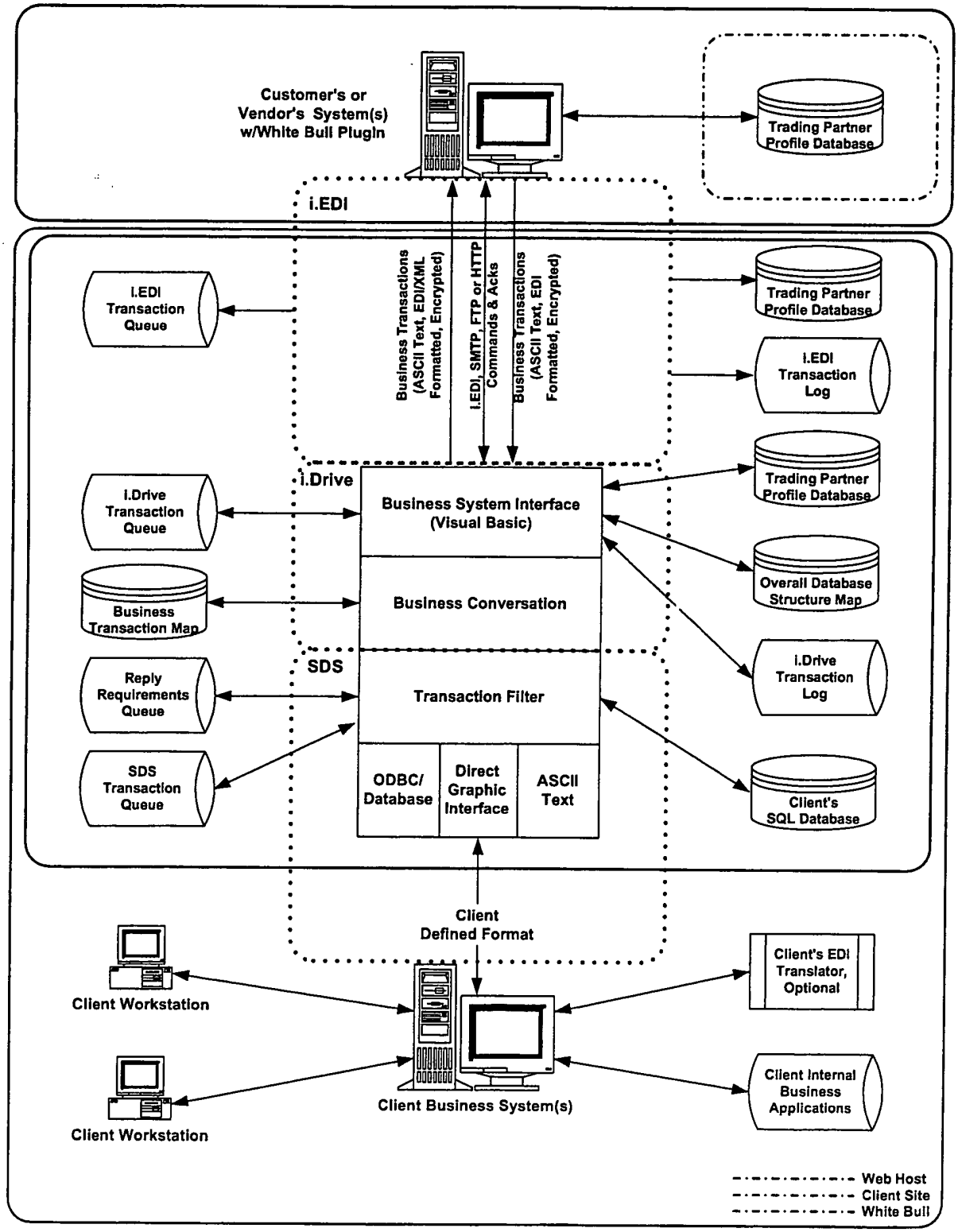
2.7.3 Technical Process Overview – Business-to-Business

The Business-to-Business option maps the Customer's business data (EDI 838 Trading Partner Profile & 868 Electronic Form Structure) to the Client's business transaction. This data is specified during Activation and an i.EDI session is begun. The Customer's White Bull Plug In will parse the data into a Customer-specified import file, for use in their Back Office application. Customer initiated transactions are generated by a Customer-supplied export file. White Bull provides for Drag-and-Drop Exporting.

As with the Business-to-Consumer option, the Business-to-Business interface processes Customer Orders, and other incoming messages, which are routed to the appropriate modules for processing. The message is logged in audit trail and history files, then mapped to the appropriate business method. The message is parsed and injected into the Symbolic Data Stream for presentation to the Back Office.

Symbolic Data Stream technology is further defined in Section 2.7.3.

2.7.3 Technical Process Overview – Business-to-Business



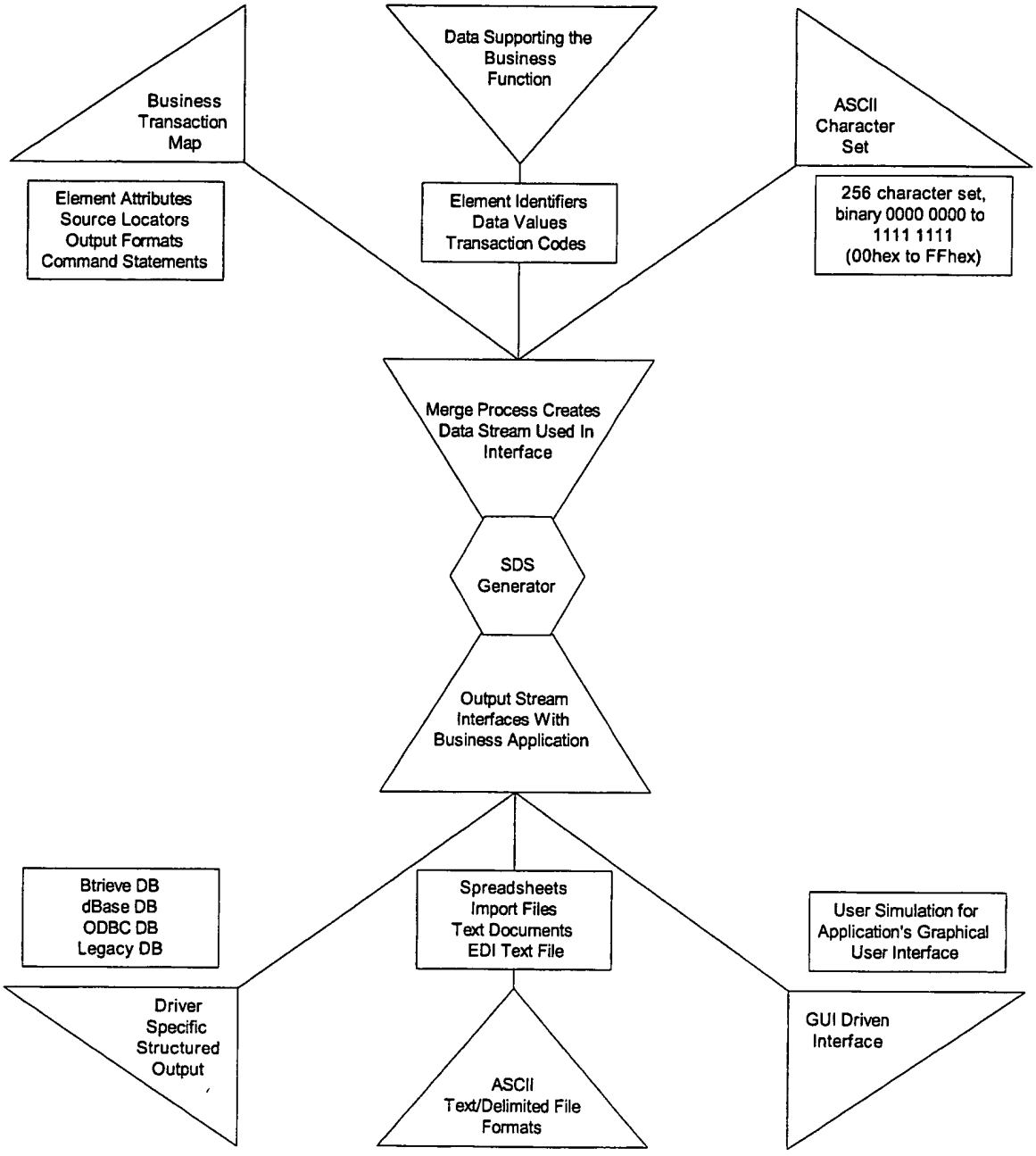
2.7.3 Symbolic Data Stream

The Symbolic Data Stream (SDS) is created during the i.Drive Process. The data supporting the business function has been parsed from the EDI structure. The Business Transaction Map (supplying the syntax and structure), the ASCII character set (used to create all possible bit combinations), and the parsed supporting data are then merged to create the output stream. The business transaction, and the requirements for communication with the business application, determines the structure and syntax of the output.

Output types are:

- Driver Specific Structured - data is passed directly to the business application's database
- ASCII Text/Delimited File - used to create import files of varying style, including Spreadsheet, Import text, EDI Structured, or any form of delimited output
- GUI Driven Interface - simulates a human interface; the delimiting characters of the data stream are standard keystrokes (i.e. TAB, HOME, END, etc.); runs the business application as though a person were entering the data through the keyboard.

2.7.3 Symbolic Data Stream (SDS)



2.7.4 Internet EDI Protocol (i.EDI)

The State Transition diagram on the following page shows the transitions from each state to the next and the events needed to complete a session. A Session is defined as beginning with, and ending with, the Idle State regardless of how you traverse the diagram.

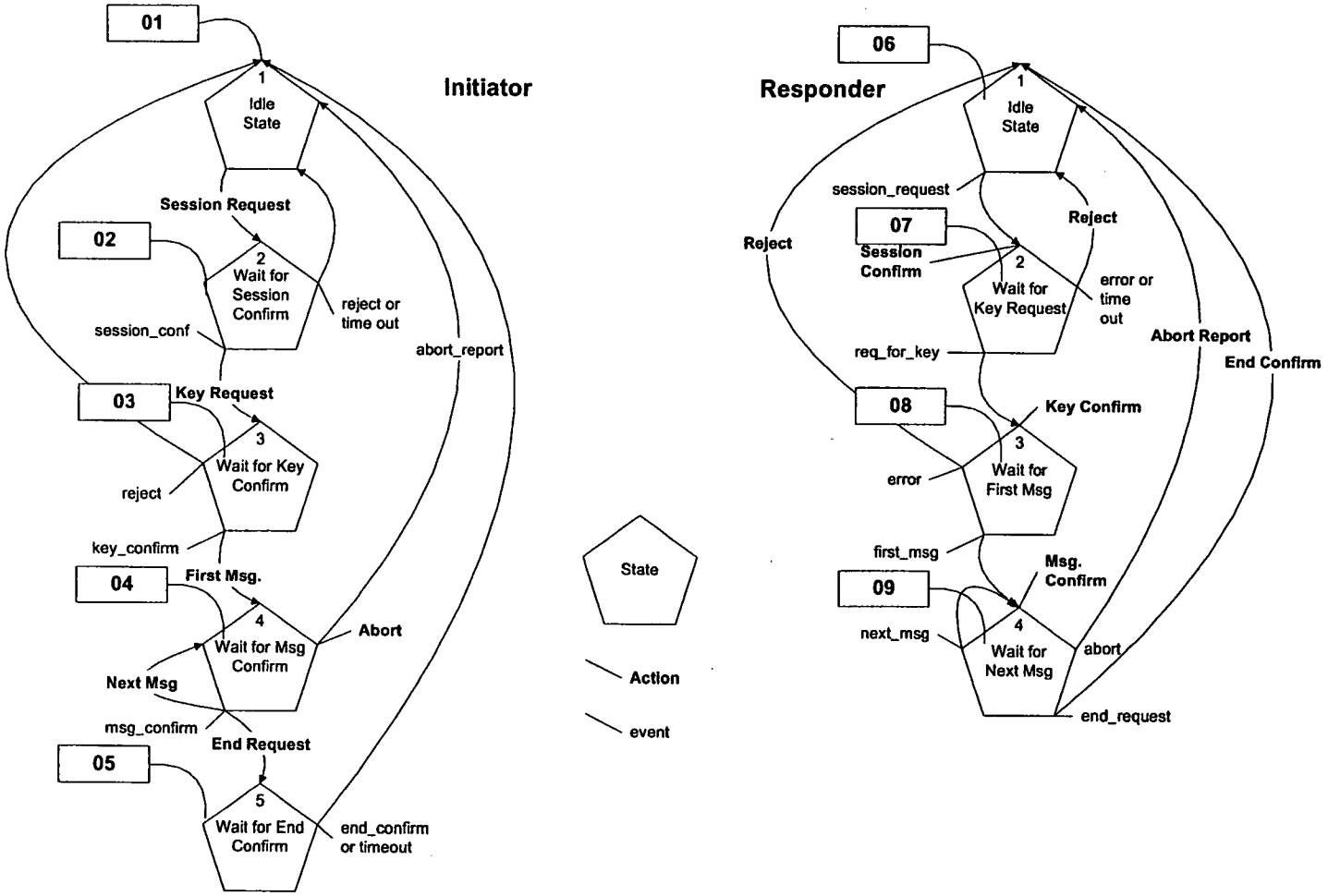
In a normal session, the initiator sends a Session Request, which includes the Initiators return path. This in turn triggers the Start Dialog Request (start_dial_req) in the Responders diagram. This initial exchange opens the TCP communication path. After receiving confirmation of the TCP connection, the Initiator sends a Key Request (start_key_req), which includes the public encryption key and signature of the Initiator. This triggers the Key Confirm event (start_key_confirm), which includes the public key and signature of the Responder.

At this point we have established the TCP connection and encryption information. The next step is to exchange EDI data. This will be our third level of connectivity, the Data State, and our lowest level of security in the session. At each state, the maintenance of the proper communication protocol, eliminates bottle-necking and enforce a secure path of communication within the session.

There will be no need for the Security Authority (SA) in this protocol. The key to this communication is in the continuous cycling of the public keys and never using the same key twice. The logistics of this is, we are communicating with the world. We must be able to talk to anyone who speaks our language (EDI). As long as we receive the correct syntactical structure in our negotiation of session, the only threat of security is from outsiders to the session, not in establishing the authenticity of the sender. Controls for malicious use of the transport are already in place in our legal system...from Fraud to Embezzlement.

Our innovative i.EDI Protocol is diagrammed on the following page.

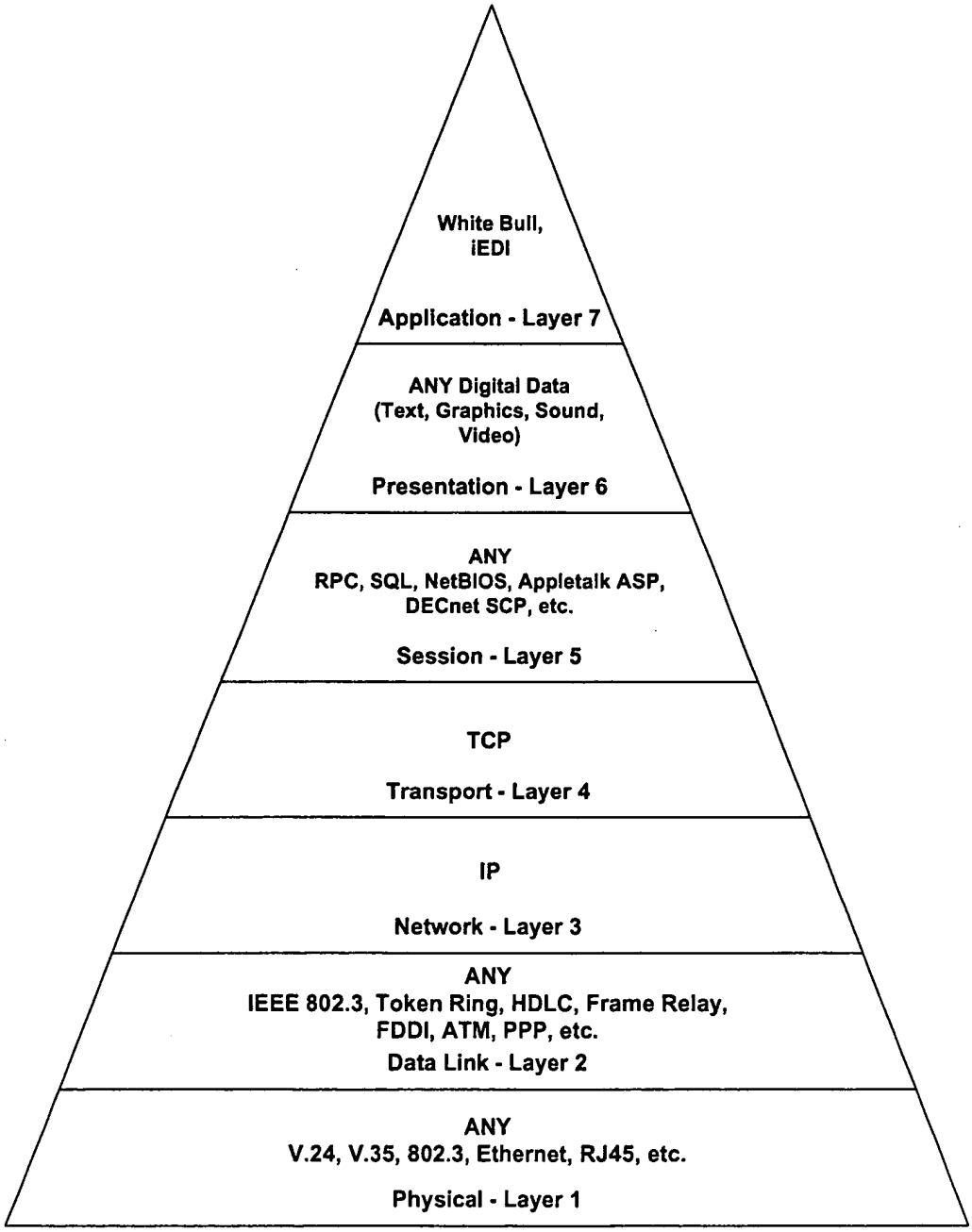
2.7.4 Internet EDI Protocol (i.EDI)



2.7.5 OSI Model & Description

The White Bull OSI Model shows the entire 7 layer model. White Bull will reside at the top Application Layer, performing the EDI translation and functional processing. The i-EDI Protocol manages connection objects, exchanging keys, encrypting/decoding messages and validating both sender and syntax.

2.7.5 OSI Model

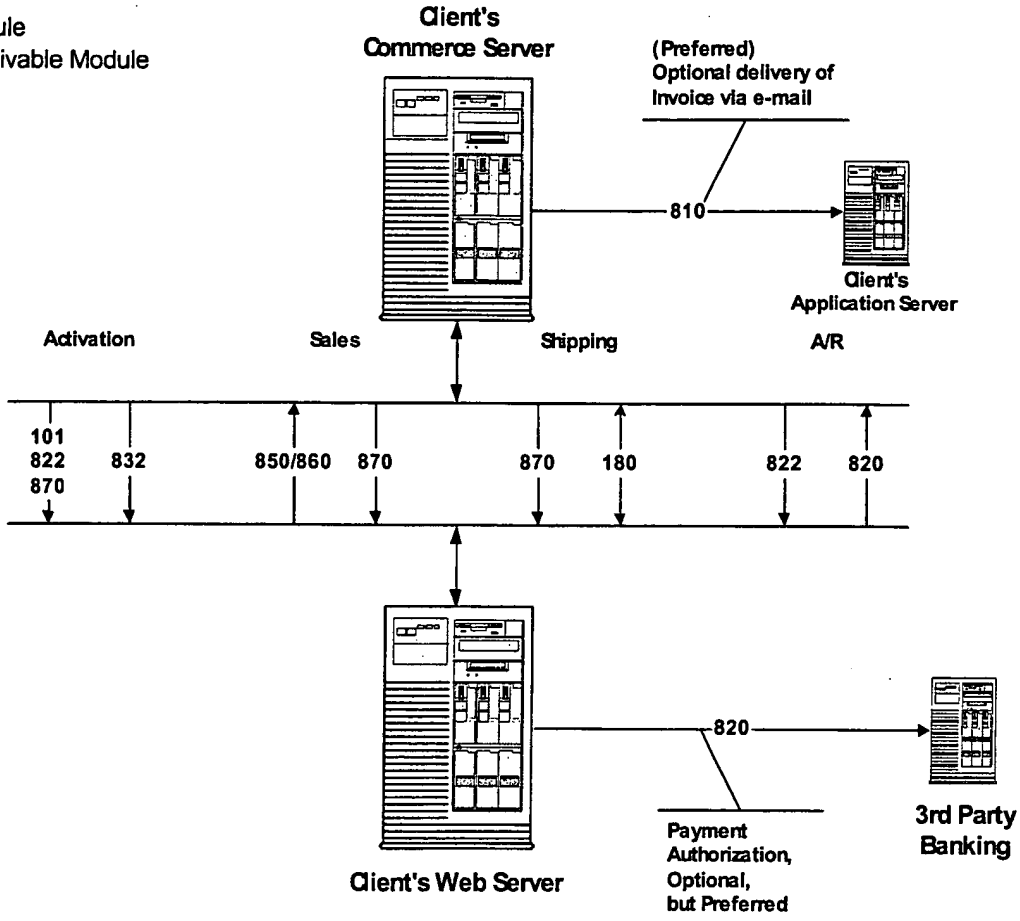


2.8.1 EDI Data Flow Diagram – Business-to-Consumer

All initial business transactions result in some form of a response. The diagram that follows details responses generated from the Commerce server, for each EDI transaction or event. In the Business-to-Consumer option, an Activation event will generate the sending of Customer information (EDI 101/822/870), as well as, the Product Catalog (EDI 832), to the Client's Web Server. In the Sales, Shipping and Accounts Receivable modules, transactions initiated from the Web Server result in responses with status information appropriate for that module.

2.8.1 EDI Data Flow Diagram – Business-to-Consumer

Module Reference:
Activation Module
Sales Module
Shipping Module
Accounts Receivable Module



EDI Transaction Reference

101 - Name & Address Lists	822 - Account Analysis
180 - Return Merchandis Authorization & Notification	832 - Price/Sales Catalog
810 - Invoice	850 - Purchase Order
820 - Payment Authorization/Remittance Advice	860 - Purchase Order Change
	870 - Order Status Report

Refer to the appendices for further information on EDI transaction standards.

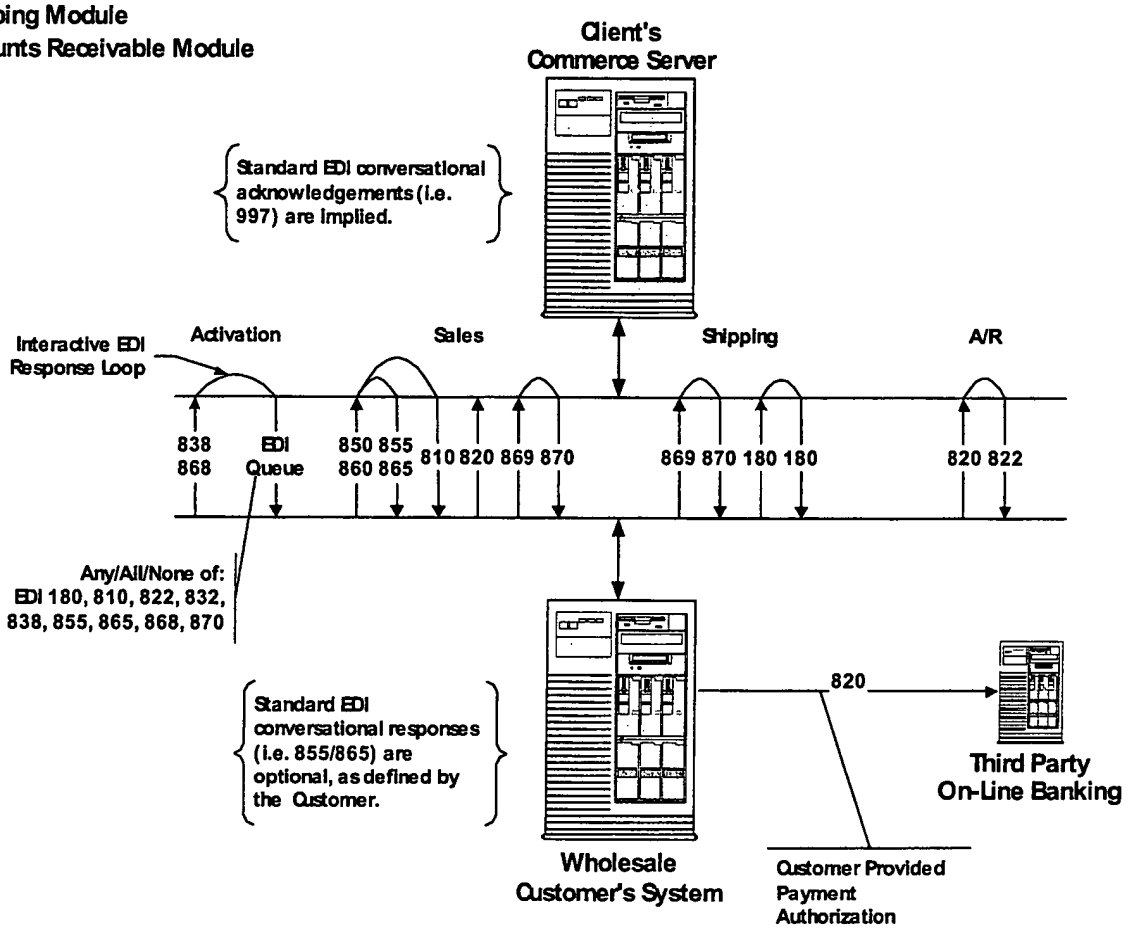
2.8.1 EDI Data Flow Diagram – Business-to-Business

For the Business-to-Business option, Activation is initiated by the Customer (after the Client has supplied and the Customer has installed the White Bull Plug In). The Customer activates the White Bull Plug In and, after setup and configuration, sends their Trading Partner Profile and Electronic Form Structure (EDI 838 & 868) to the Client's Commerce server. The Commerce server optionally replies with updated EDI 838/868 data and any accumulated response transactions in queue.
In the Sales, Shipping and Accounts Receivable modules, transactions initiated from the Customer site result in standard EDI business responses.

The i.EDI Transport Protocol, for communications between the White Bull Plug In and the Commerce server, incorporates the standard EDI 997 Functional Acknowledgement which is used to indicate validation of EDI syntactical conformance. Our standard setting protocol is defined in more detail in Section 2.7.4.

2.8.1 EDI Data Flow Diagram – Business-to-Business

Module Reference:
Activation Module
Sales Module
Shipping Module
Accounts Receivable Module



EDI Transaction Reference

180 - Return Merchandise Authorization & Notification	850 - Purchase Order
810 - Invoice	855 - P.O. Acknowledgement (Optional)
820 - Payment Authorization/Remittance Advice	860 - Purchase Order Change
822 - Account Analysis	865 - P.O. Change Acknowledgement (Optional)
832 - Price/Sales Catalog	868 - Electronic Form Structure
838 - Trading Partner Profile	869 - Order Status Request
	870 - Order Status Report

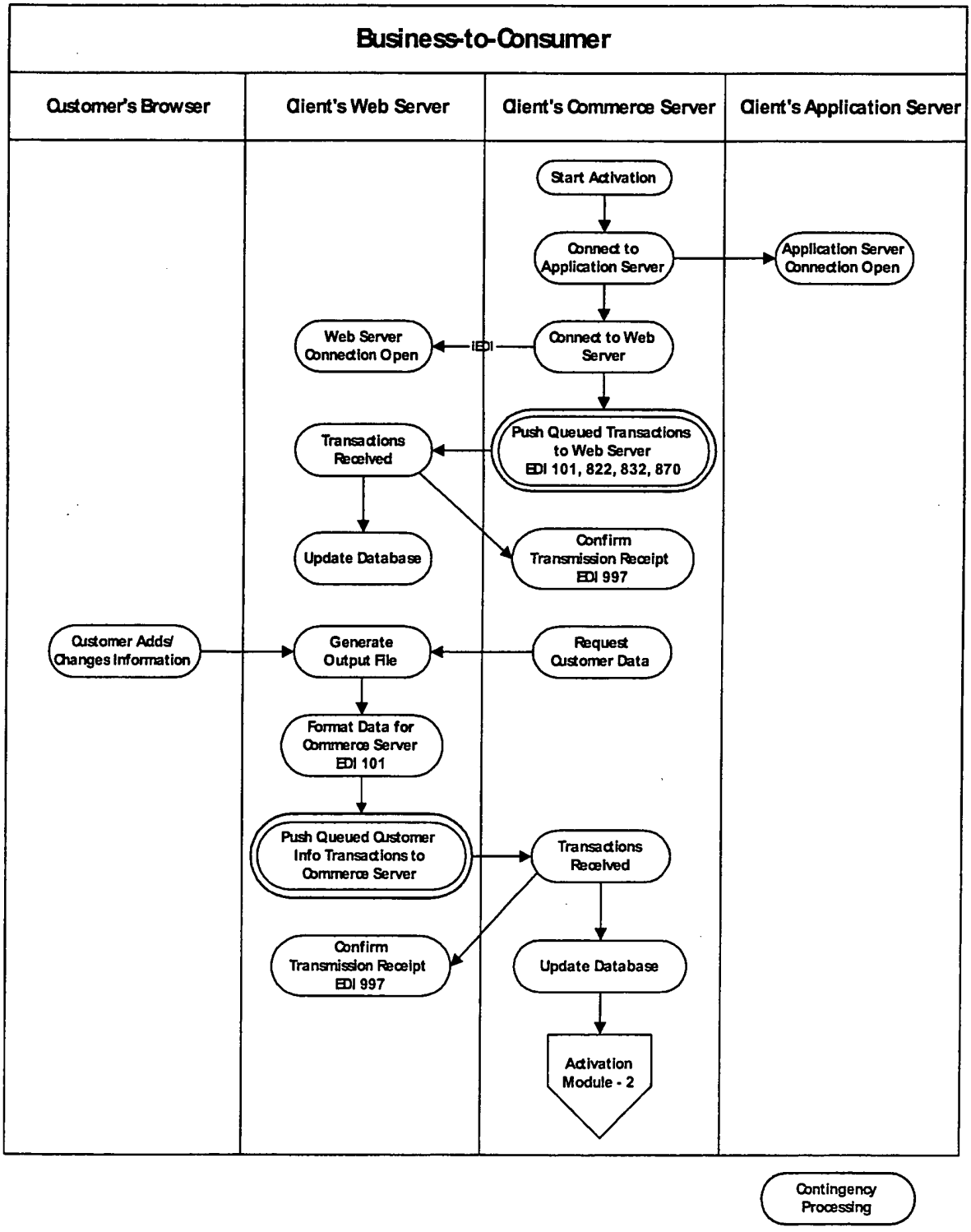
Refer to the appendices for further information on EDI transaction standards.

3.1 Conversational Detailed Flowcharts

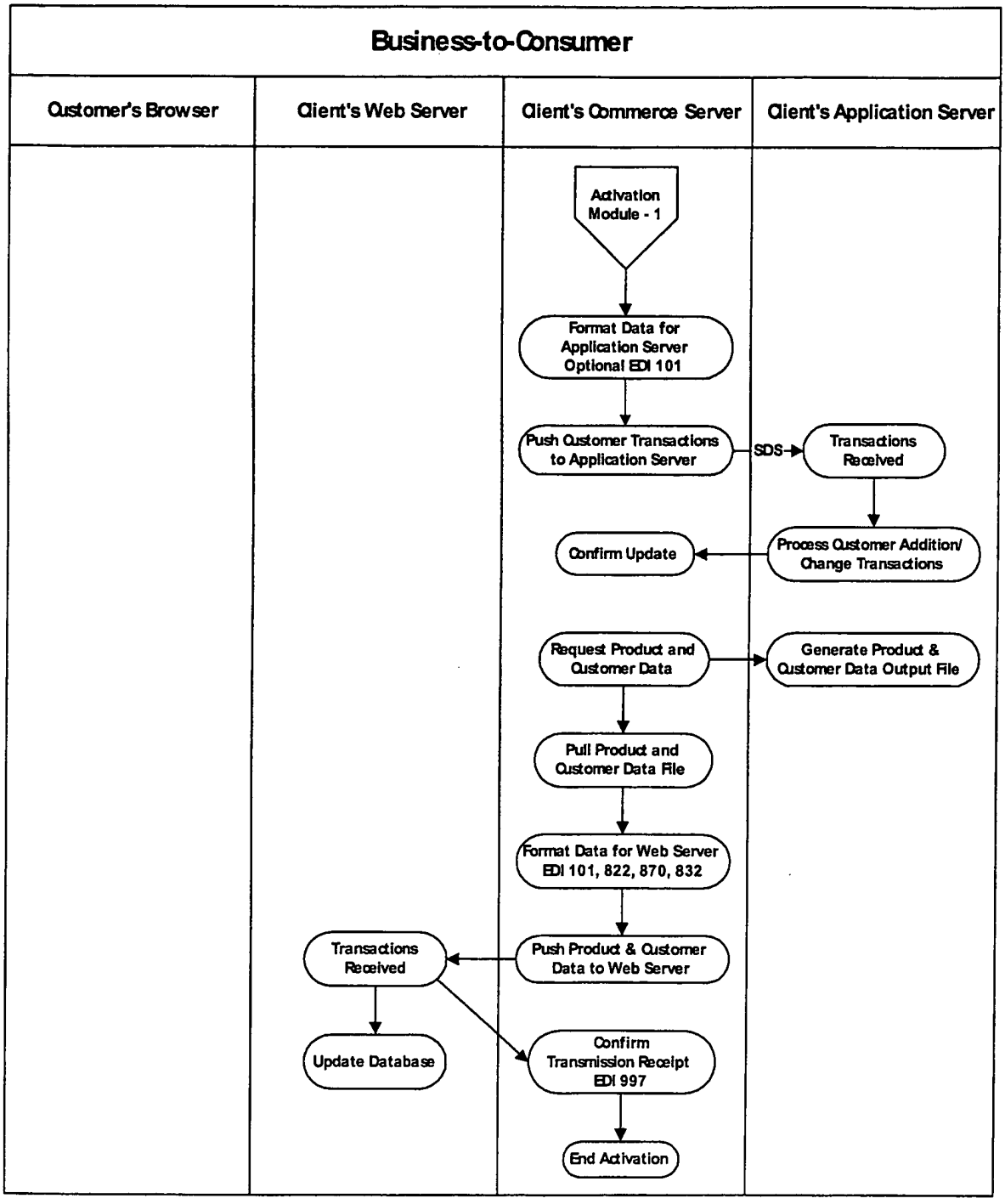
Conversational Detailed Flowcharts for the Activation Module of both the Business-to-Consumer and Business-to-Business models follow on the next few pages. This design method supports the need for integration of business processes over a number of operating platforms between vendors, customers and business partners resulting in improved interoperability. This is a unique method of depicting a process flow in that all operating platforms from Front to Back Office and the dialogue that ensues are presented.

The Development Team is in the process of completing the conversational flows for the remaining modules

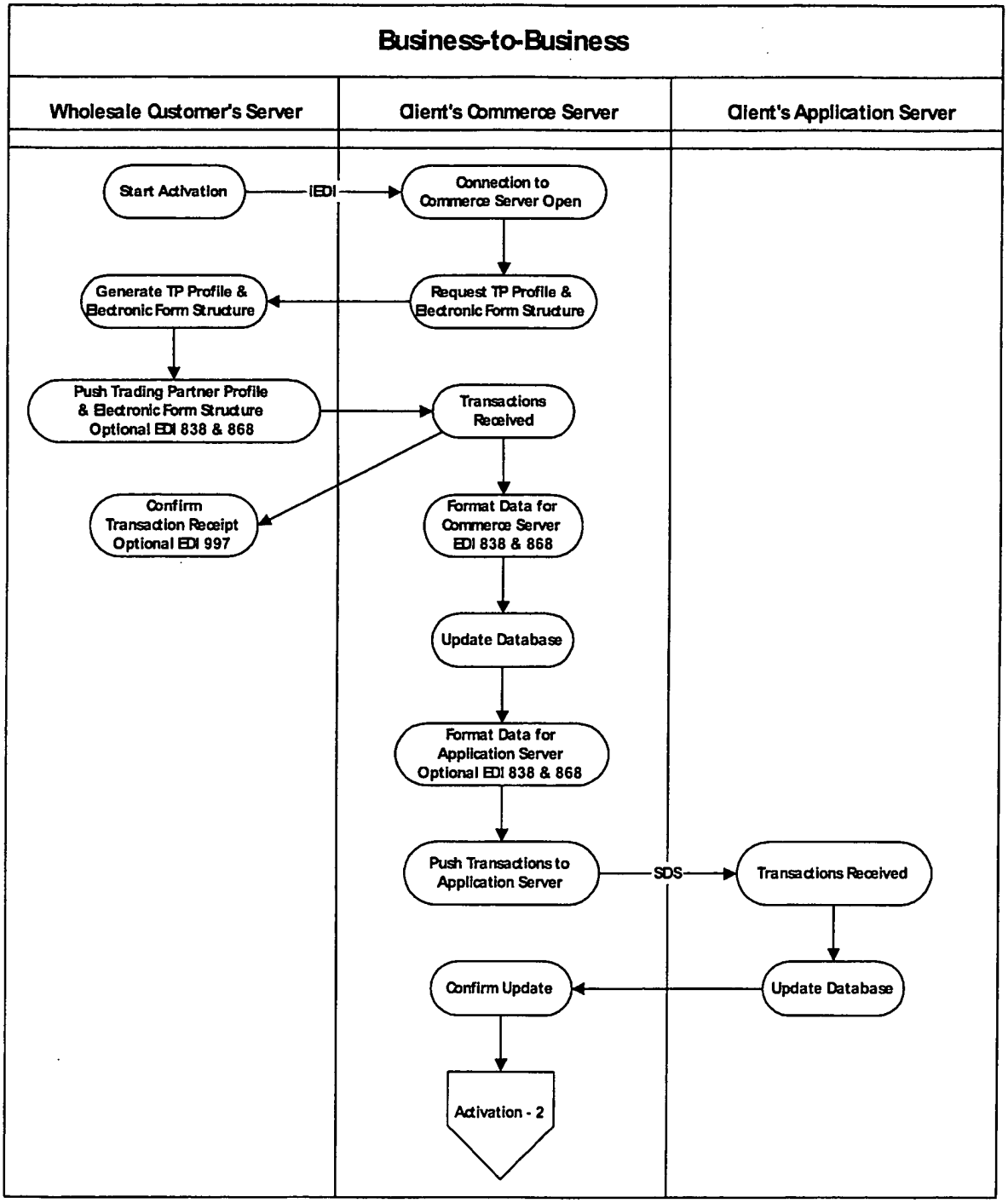
3.1.1 Activation Module - Example



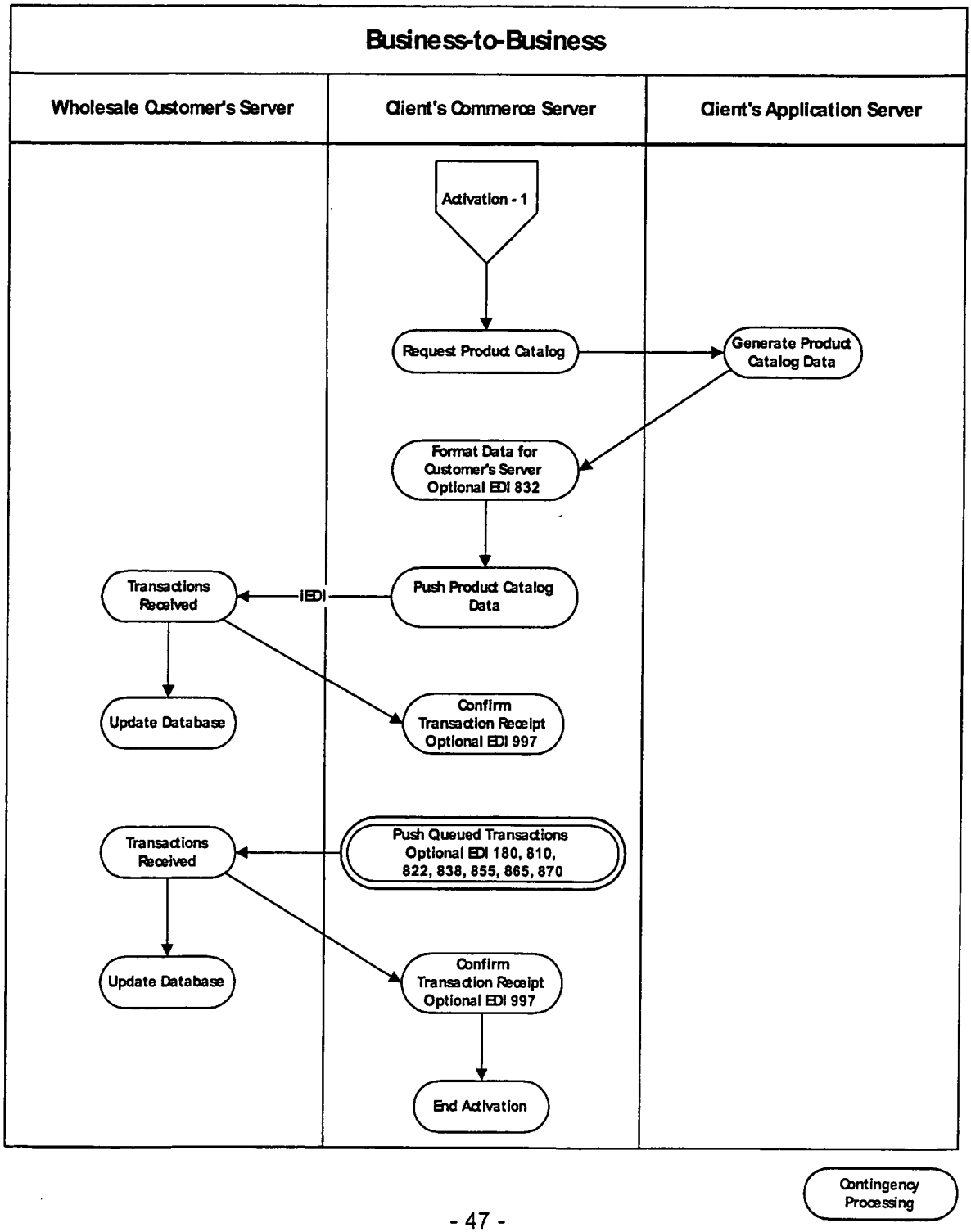
3.1.1 Activation Module - Example



3.1.1 Activation Module - Example



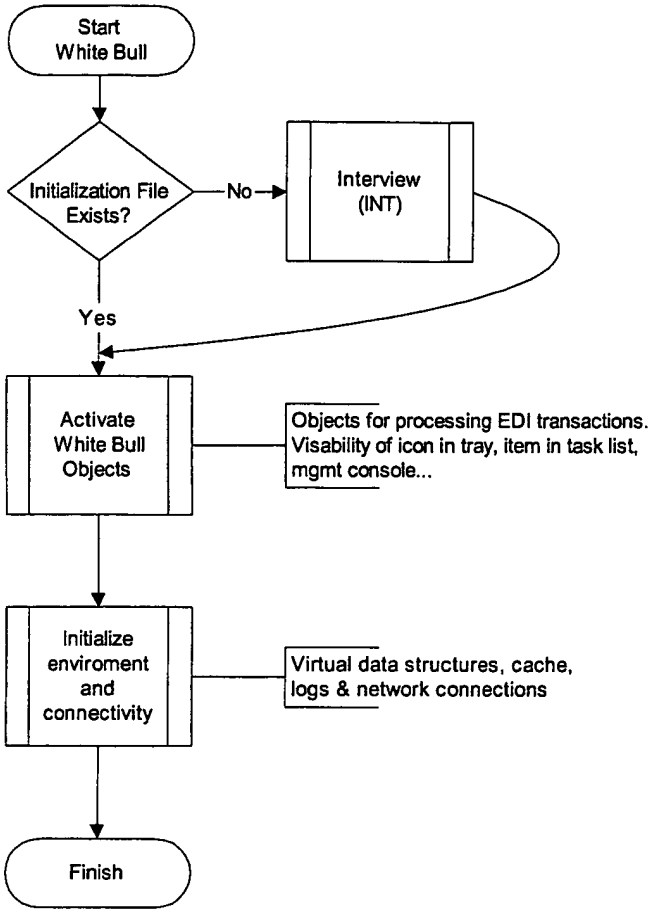
3.1.1 Activation Module - Example



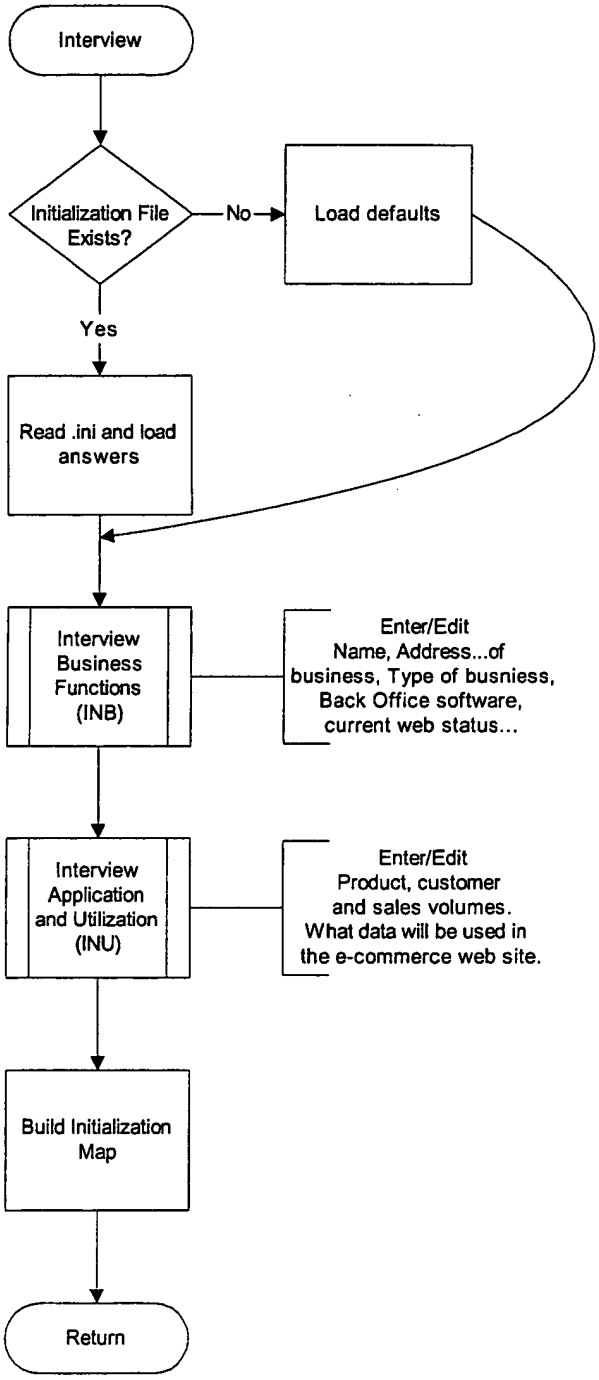
3.2 Technical Detailed Process Flowcharts

Detailed process flowcharts for the technical aspects of the White Bull Activation Module are included on the following pages. The development team is in the process of completing these flows for all modules.

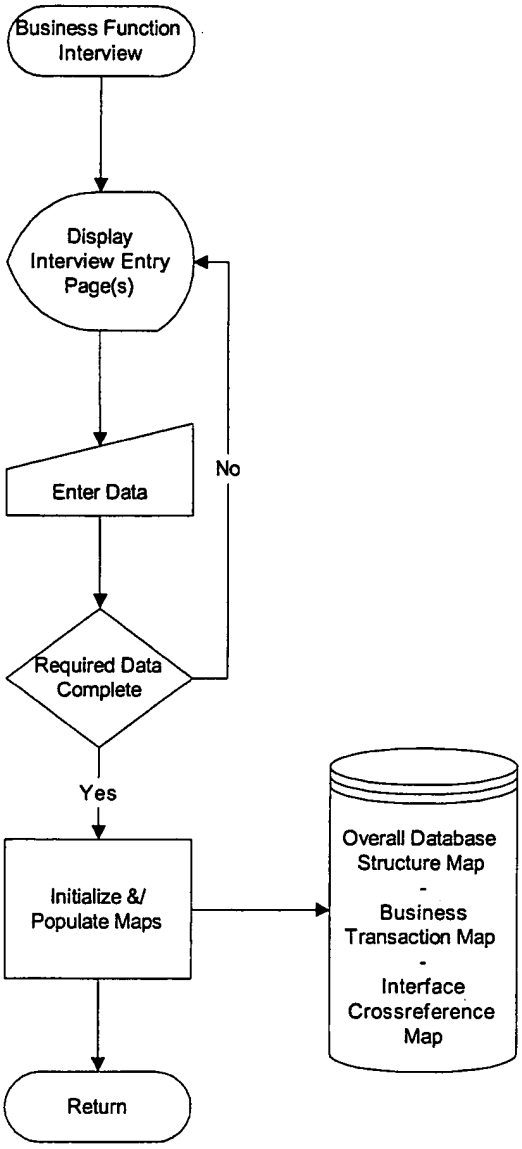
3.2.1 Activation Module – Example



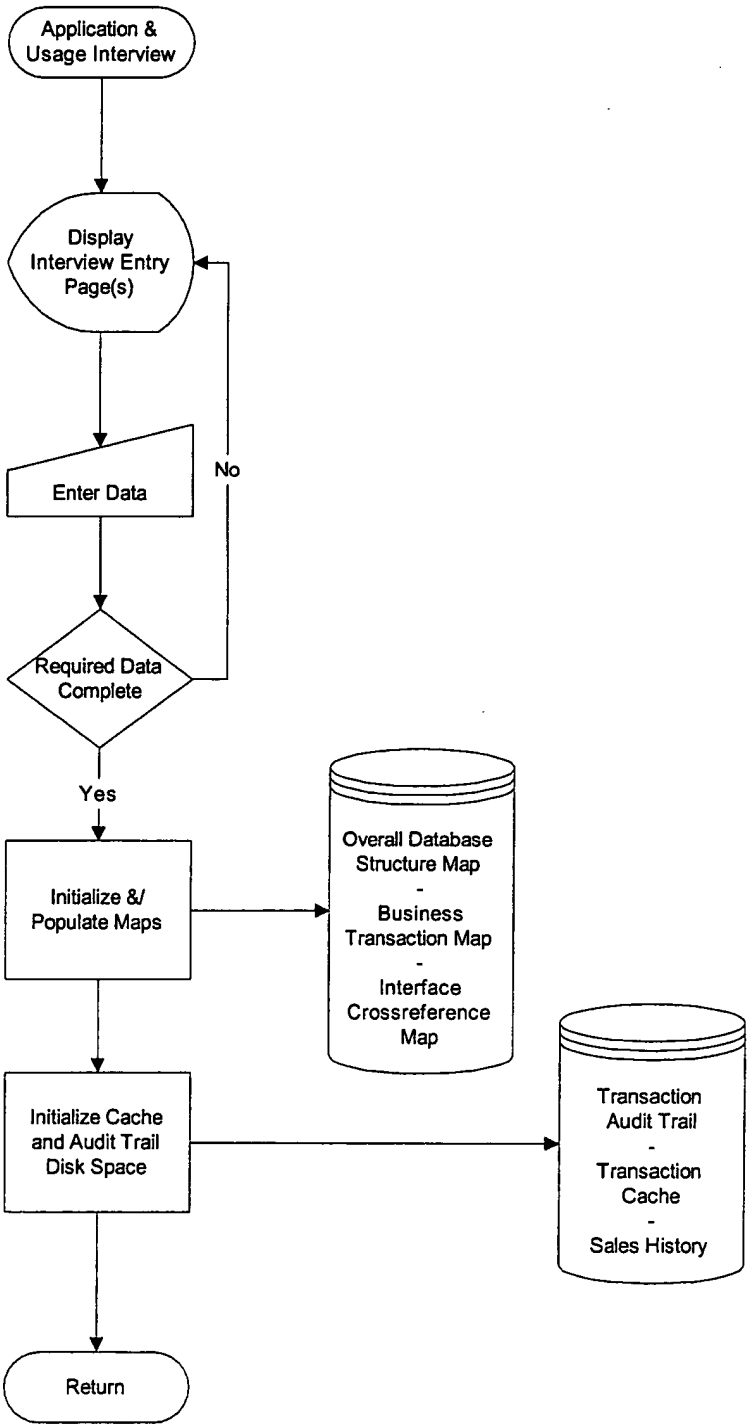
3.2.1 Activation Module - Example



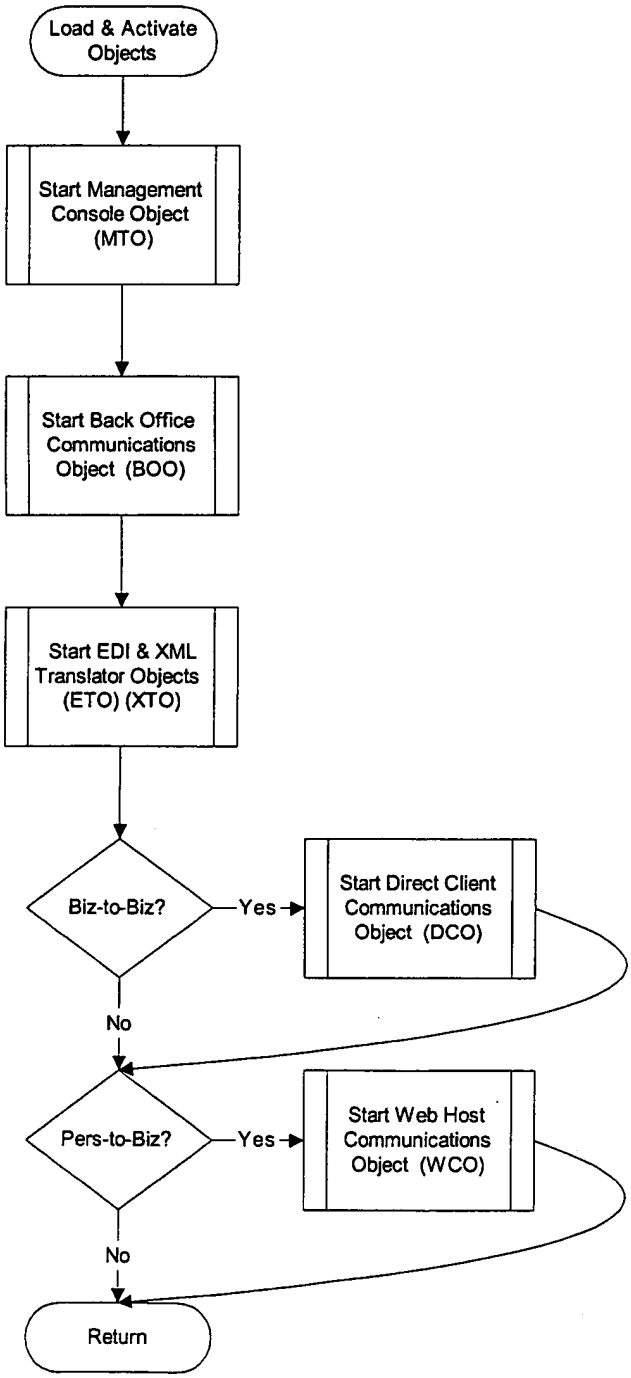
3.2.1 Activation Module - Example



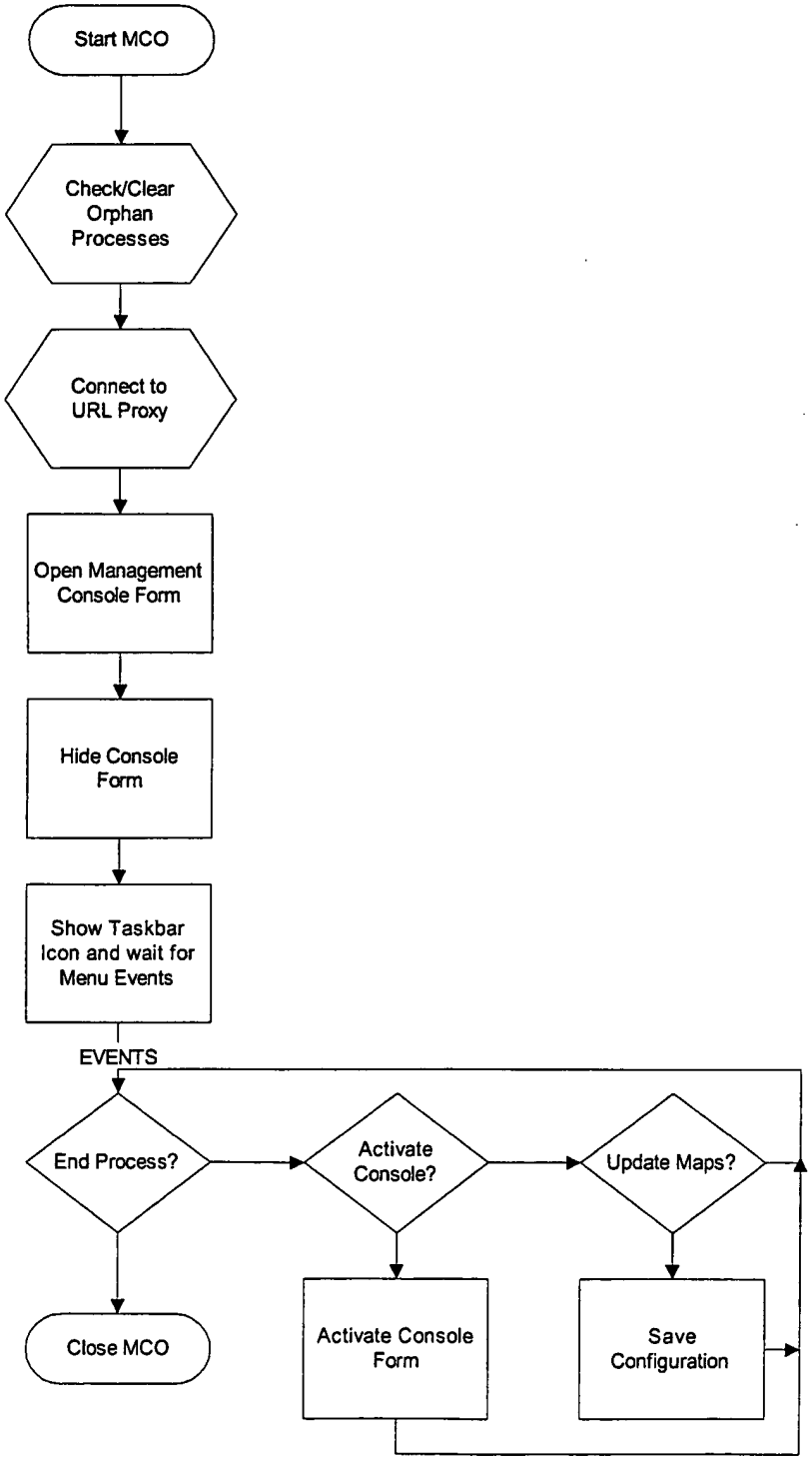
3.2.1 Activation Module - Example



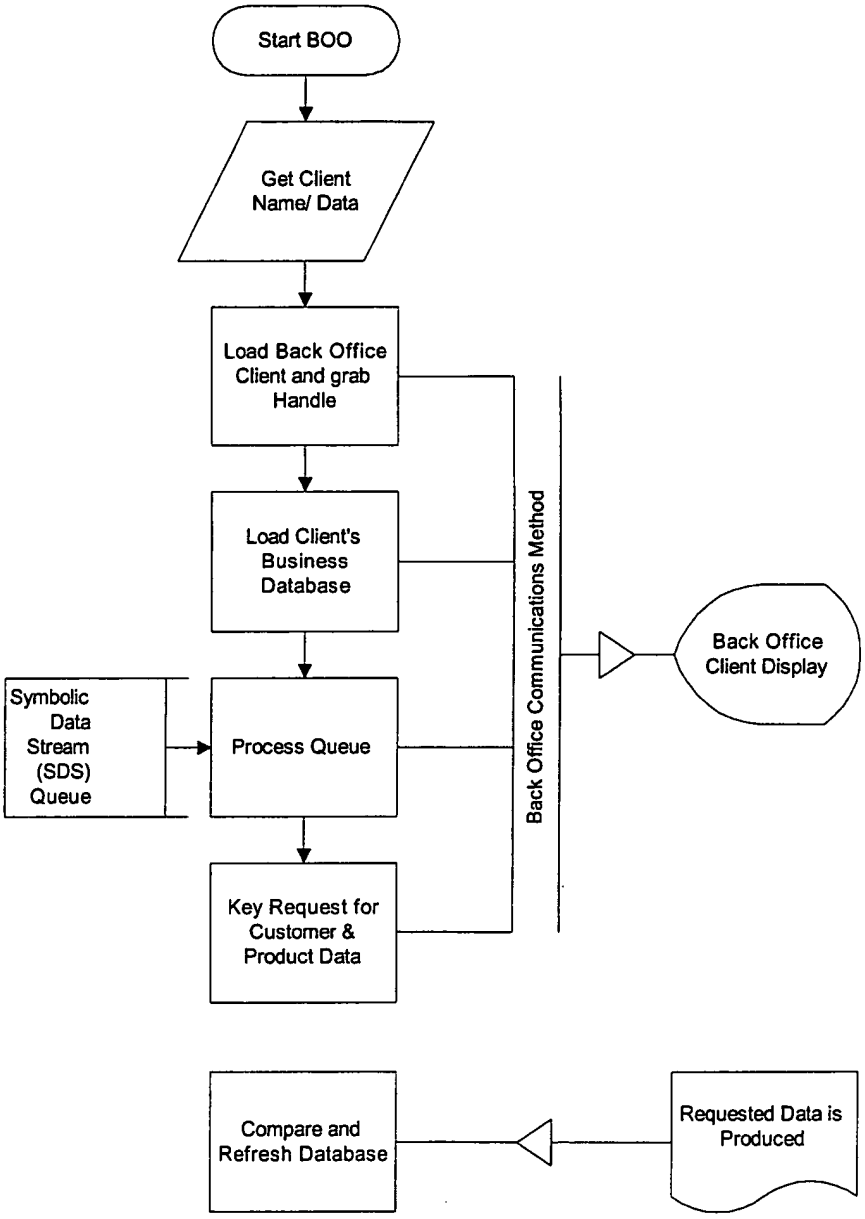
3.2.1 Activation Module - Example



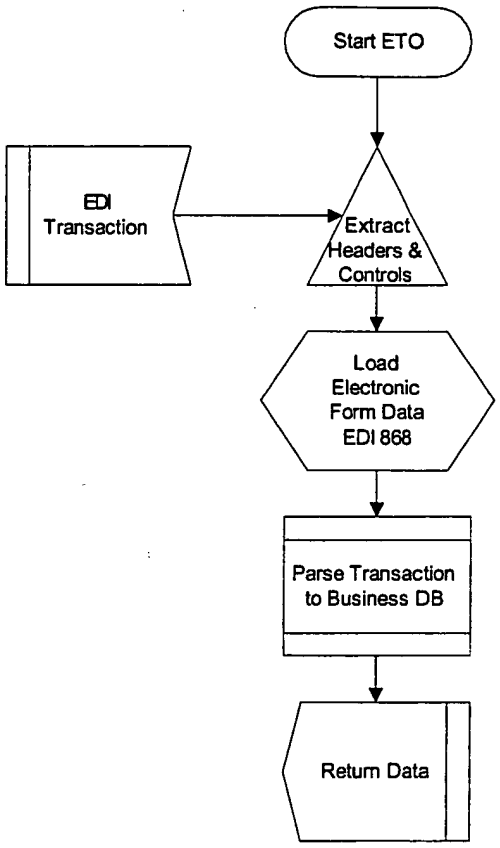
3.2.1 Activation Module - Example



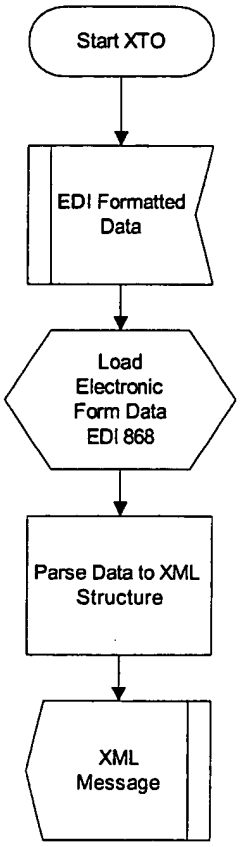
3.2.1 Activation Module - Example



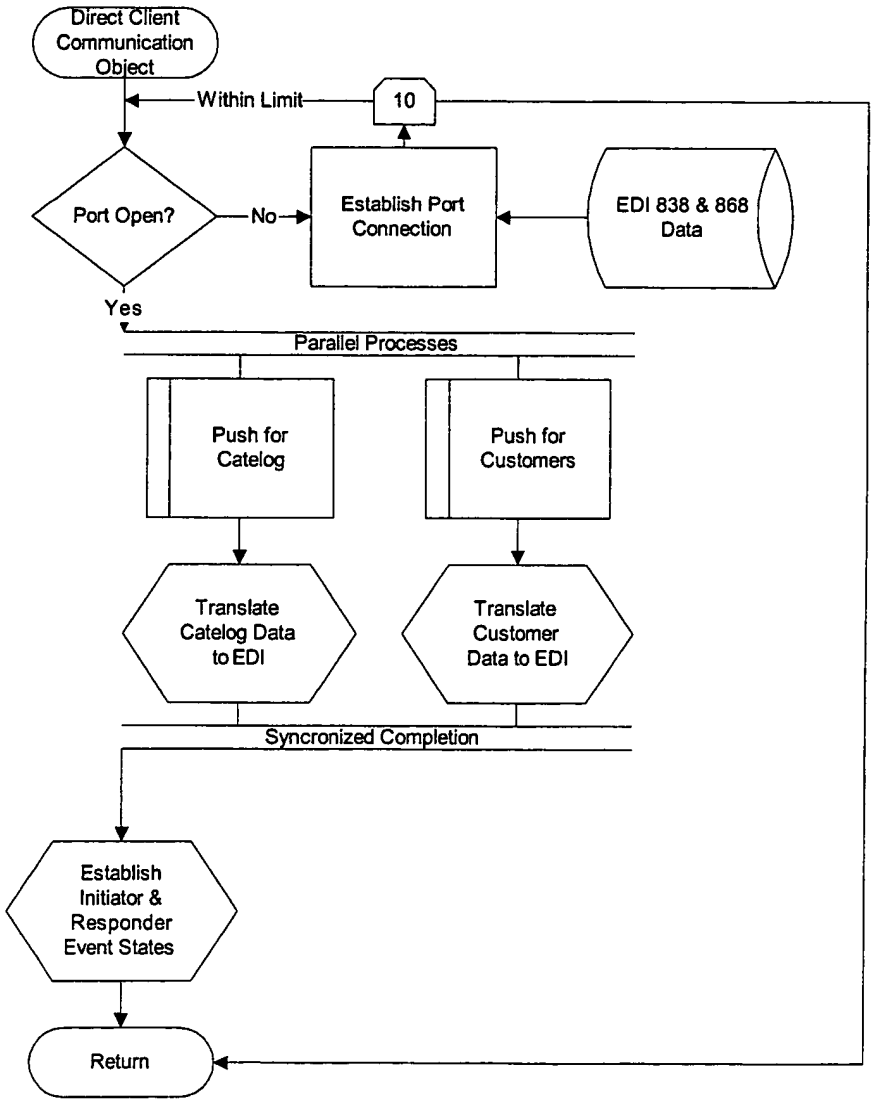
3.2.1 Activation Module - Example



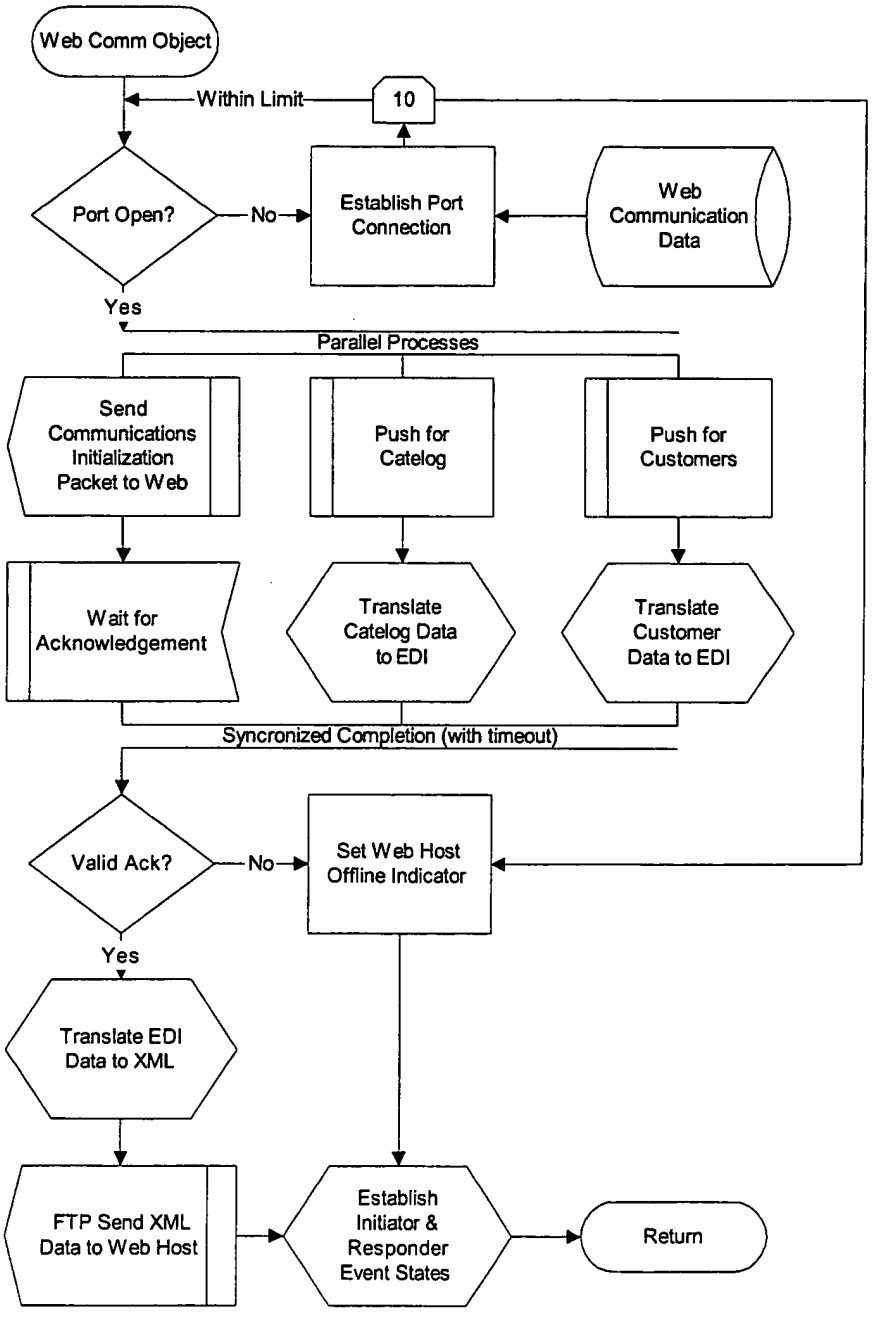
3.2.1 Activation Module - Example



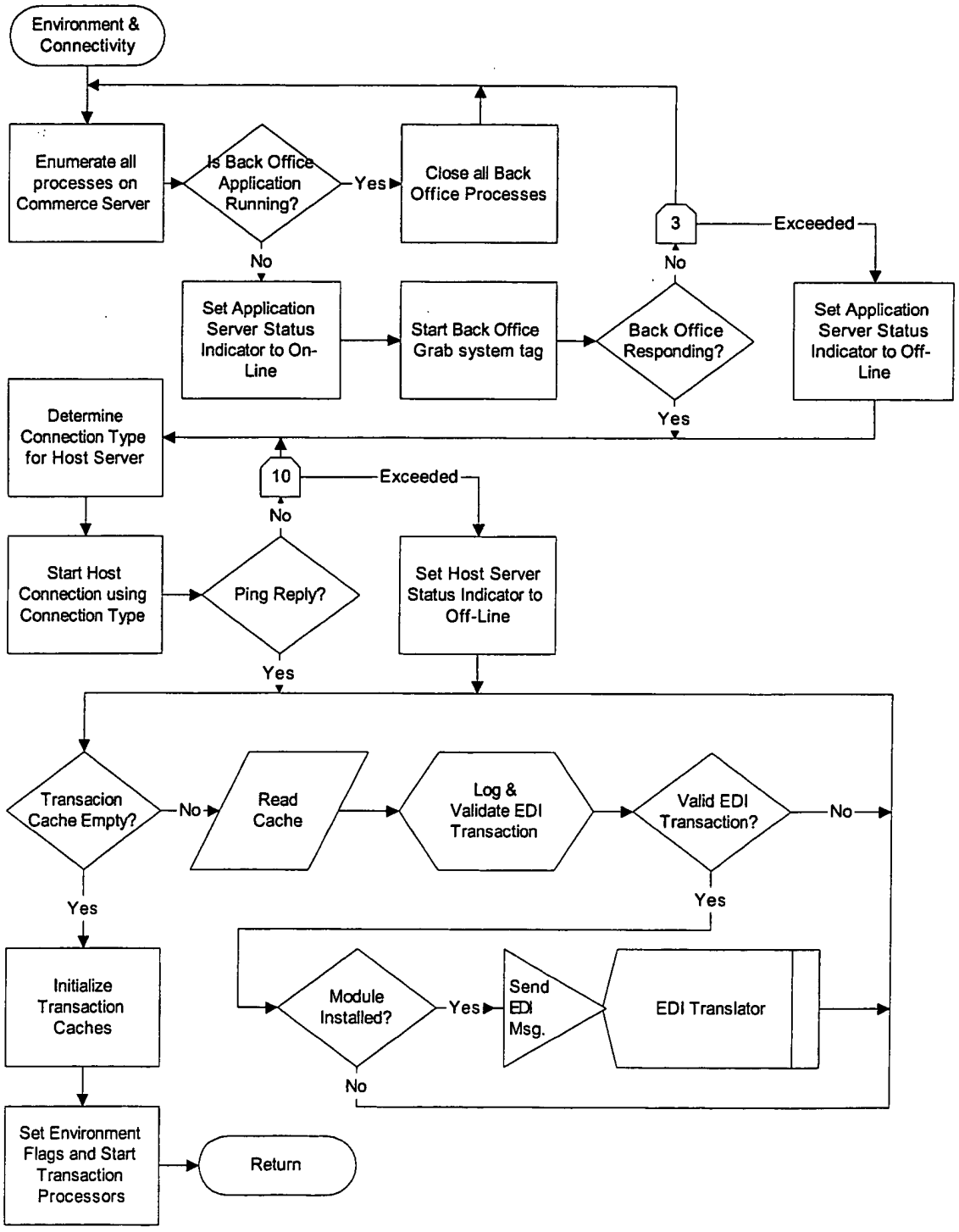
3.2.1 Activation Module - Example



3.2.1 Activation Module - Example



3.2.1 Activation Module - Example



4. Transaction Mapping

The White Bull Development Team is in the process of developing and documenting Transaction Mapping for all transactions included in the initial modules. For the purposes of this document, complete mapping of the 101 Name and Address List is provided as an example. Additional transactions will be added to this document as deemed appropriate.

4.1 Name and Address List

Field Layout for

EDI Transaction Set 101
with Xref to Quick Books and Web Site

Name and Address List – Outbound to Web Host

ANSI Version/Release
ISA: 00403
GS: 004030

Overview of Transaction Set 101

This document outlines the segments used by White Bull and what is contained in each. The first table is a view the entire transaction set; the preceding tables break down and define the usage of the individual segments.

					Segment Description	Req. M/O	Maximum Use
ISA					Interchange Control Header	M	1
	GS				Functional Group Header	M	1
		ST			Transaction Set Header	M	1
			BGN		Beginning Segment Name & Address	M	1
					LOOP ID - DTM		**>1**
			DTM		Date/Time Reference	M	1
			N1		Name	O	1-50
					LOOP ID - LX		**>1**
			LX		Assigned Number	M	1
			IN2		Individual Name Structure Components	M	>1
			NX2		Location Components	M	>1
			REF		Reference Identification	O	>1
			SPA		Status of Product or Activity	O	1
			COM		Communication Contact Information	O	>1
		SE			Transaction Set Trailer	M	1
	GE				Functional Group Trailer	M	1
IEA					Interchange Control Trailer	M	1

4.1 Name and Address List

ISA – Interchange Control Header
Purpose: To start and identify an interchange of one or more functional groups' interchange related control segments.

Legend:
Incoming from Customer
EDI White Bull Standards
Output to Client
Application

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101ISA-Authorization-Information-Qualifier	B2C-AC101ISA-Authorization-Information-Qualifier	ISA01	I01	AC101ISA-Authorization-Information-Qualifier	M	ID	2/2	00 = No authorization information Present	N/A
B2B-AC101ISA-Authorization-Information	B2C-AC101ISA-Authorization-Information	ISA02	I02	AC101ISA-Authorization-Information	M	AN	10/10	Session Initiator Generated Session Number at Session Start 10 Characters Static	N/A
B2B-AC101ISA-Security-Information-Qualifier	B2C-AC101ISA-Security-Information-Qualifier	ISA03	I03	AC101ISA-Security-Information-Qualifier	M	ID	2/2	01 = Password	N/A
B2B-AC101ISA-Security-Information	B2C-AC101ISA-Security-Information	ISA04	I04	AC101ISA-Security-Information	M	AN	10/10	Password 10 Characters Static	N/A
B2B-AC101ISA-Interchange-ID-Qualifier	B2C-AC101ISA-Interchange-ID-Qualifier	ISA05	I05	AC101ISA-Interchange-ID-Qualifier	M	ID	2/2	ZZ = Mutually Assigned - 2 Character Static	N/A

4.1 Name and Address List

ISA – Interchange Control Header (continued)

B2B-AC101ISA-Interchange-Sender-ID	B2C-AC101ISA-Interchange-Sender-ID	ISA06	I06	AC101ISA-Interchange-Sender-ID	M	AN	15/15	Session Acceptor 15 Characters Static - Assigned at Session Start	N/A
B2B-AC101ISA-Interchange-ID-Qualifier-02	B2C-AC101ISA-Interchange-ID-Qualifier-02	ISA07	I05	AC101ISA-Interchange-ID-Qualifier2	M	ID	2/2	Use I05 Above	N/A
B2B-AC101ISA-Interchange-Receiver-ID	B2C-AC101ISA-Interchange-Receiver-ID	ISA08	I07	AC101ISA-Interchange-Receiver-ID	M	AN	15/15	Use I06 Above	N/A
B2B-AC101ISA-Current-Date	B2C-AC101ISA-Current-Date	ISA09	I08	AC101ISA-Current-Date	M	DT	6/6	Current date: YYMMDD	N/A
B2B-AC101ISA-Current-Time	B2C-AC101ISA-Current-Time	ISA10	I09	AC101ISA-Current-Time	M	TM	4/4	Current time: HHMM	N/A
B2B-AC101ISA-Repetition Separator	B2C-AC101ISA-Repetition Separator	ISA11	I65	AC101ISA-Repetition Separator	M		1/1	& = Repetition Separator	N/A
B2B-AC101ISA-Interchange-Version ID	B2C-AC101ISA-Interchange-Version ID	ISA12	I11	AC101ISA-Interchange-Version ID	M	ID	5/5	04030	N/A

4.1 Name and Address List

ISA – Interchange Control Header (continued)

B2B-AC101ISA-Interchange-Control Number	B2C-AC101ISA-Interchange-Control Number	ISA13	I12	AC101ISA-Interchange-Control Number	M	N0	9/9	Incremented Number to Identify this Transaction - Assigned by Sender	N/A
B2B-AC101ISA-Acknowledgment	B2C-AC101ISA-Acknowledgment	ISA14	I13	AC101ISA-Acknowledgment	M	ID	1/1	0 = no acknowledgment	N/A
B2B-AC101ISA-Test- Indicator	B2C-AC101ISA-Test- Indicator	ISA15	I14	AC101ISA-Test- Indicator	M	ID	1/1	P = production data T = test data	N/A
B2B-AC101ISA-Component-Element-Seperator	B2C-AC101ISA-Component-Element-Seperator	ISA16	I15	AC101ISA-Component-Element-Seperator	M		1/1	; = Component Separator	N/A

4.1 Name and Address List

GS – Functional Group Header
Purpose: To start and identify a functional group of related transaction sets and provide control and application identification information.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101GS-Functional-ID-Code	B2C-AC101GS-Functional-ID-Code	GS01	479	AC101GS-Functional-ID-Code	M	ID	2/22	NL = Name / Address List	N/A
B2B-AC101GS-Application-Sender-Code	B2C-AC101GS-Application-Sender-Code	GS02	142	AC101GS-Application-Sender-Code	M	AN	2/15	This will equal I12 Data	N/A
B2B-AC101GS-Application-Receiver-Code	B2C-AC101GS-Application-Receiver-Code	GS03	124	AC101GS-Application-Receiver-Code	M	AN	2/15	Trading Partner Id. Opposing value Between Sender and Receiver	N/A
B2B-AC101GS-Data-Interchange-Date	B2C-AC101GS-Data-Interchange-Date	GS04	373	AC101GS-Data-Interchange-Date	M/Z	DT	8/8	Will Equal I08 Data	N/A
B2B-AC101GS-Data-Interchange-Time	B2C-AC101GS-Data-Interchange-Time	GS05	377	AC101GS-Data-Interchange-Time	M/Z	TM	4/8	Will Equal I09 Data	N/A
B2B-AC101GS-Data-Interchange-Control-Number	B2C-AC101GS-Data-Interchange-Control-Number	GS06	28	AC101GS-Data-Interchange-Control-Number	M/Z	N0	1/9	Incremented Number Assigned By Sender 9 Digit Mandatory Starting with 000000001	N/A

4.1 Name and Address List

GS – Functional Group Header (continued)

B2B-AC101GS-Responsible-Agency-Code	B2C-AC101GS-Responsible-Agency-Code	GS07	455	AC101GS-Responsible-Agency-Code	M	ID	1/2	X = ANSI X12	N/A
B2B-AC101GS-Version	B2C-AC101GS-Version	GS08	480	AC101GS-Version	M	AN	1/12	04030	N/A

4.1 Name and Address List

ST – Transaction Set Header Segment
Purpose: To indicate the start of a transaction set and to assign a control number.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101ST-Transaction-Set-ID-Code	B2C-AC101ST-Transaction-Set-ID-Code	ST01	143	AC101ST-Transaction-Set-ID-Code	M/Z	ID	3/3	101 = Name and Address List	N/A
B2B-AC101ST-Transaction-Set-Control-Number	B2C-AC101ST-Transaction-Set-Control-Number	ST02	329	AC101ST-Transaction-Set-Control-Number	M	AN	4/9	Sequential number assigned by sender. Numeric Value 9 Digits Mandatory Zero Padded Starting With 00000001	N/A

4.1 Name and Address List

BGN – Beginning Segment for Name & Address List
Purpose: To indicate the beginning of a Name And Address List Transaction set and to transmit identifying numbers and dates.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101BGN-Transaction-Set-Purpose	B2C-AC101BGN-Transaction-Set-Purpose	BGN01	353	AC101BGN-Transaction-Set-Purpose	M	ID	2/2	00 = Original 05 = Replacement	N/A
B2B-AC101BGN-Reference-Identification	B2C-AC101BGN-Reference-Identification	BGN02	127	AC101BGN-Reference-Identification	M/Z	AN	1/50	Sender Generated Reference Identification	N/A
B2B-AC101BGN-Date	B2C-AC101BGN-Date	BGN03	373	AC101BGN-Date	M/Z	DT	8/8	Date	N/A
B2B-AC101BGN-Time	B2C-AC101BGN-Time	BGN04	337	AC101BGN-Time	X/Z	TM	4/8	Time	N/A
B2B-AC101BGN-Time-Code	B2C-AC101BGN-Time-Code	BGN05	623	AC101BGN-Time-Code	O/Z	ID	2/2	Time Codes (01 through 24)	N/A
B2B-AC101BGN-Reference-Identification	B2C-AC101BGN-Reference-Identification	BGN06	127	AC101BGN-Reference-Identification	O/Z	AN	1/50	BGN02 of previous Transaction - Historical Reference - If Necessary	N/A
B2B-AC101BGN-Transaction-Type-Code	B2C-AC101BGN-Transaction-Type-Code	BGN07	640	AC101BGN-Transaction-Type-Code	O	ID	2/2	ML = Membership List	N/A

4.1 Name and Address List

BGN – Beginning Segment for Name & Address List (continued)

B2B-AC101BGN-Action-Code	B2C-AC101BGN-Action-Code	BGN08	306	AC101BGN-Action-Code	O	ID	1/2	02 = Change or Update Current Data Base	N/A
B2B-AC101BGN-Security-Level-Code	B2C-AC101BGN-Security-Level-Code	BGN09	786	AC101BGN-Security-Level-Code	O	ID	2/2	09 = Trading Partner	N/A

4.1 Name and Address List

DTM – Date and Time Reference
Purpose: To specify pertinent dates and times. Time stamp for list creation.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101DTM-Date/Time-Qualifier	B2C-AC101DTM-Date/Time-Qualifier	DTM01	374	AC101DTM-Date/Time-Qualifier	M	ID	3/3	007 = Effective Date of Created List	N/A
B2B-AC101DTM-Date	B2C-AC101DTM-Date	DTM02	373	AC101DTM-Date	X	DT	8/8	Current Date	N/A
B2B-AC101DTM-Time	B2C-AC101DTM-Time	DTM03	337	AC101DTM-Time	X	TM	4/8	Current Time	N/A
B2B-AC101DTM-Zone	B2C-AC101DTM-Zone	DTM04	623	AC101DTM-Zone	O	ID	2/2	Time Zones (01 Through 24)	N/A

4.1 Name and Address List

N1 – Name
Purpose: To identify a party by type of organization, name, and code. Identifies the source of this list data.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101N1-Entity-ID-Code	B2C-AC101N1-Entity-ID-Code	N101	98	AC101N1-Entity-ID-Code	M	ID	2/3	2J = Individual 2K = Business	2K
B2B-AC101N1-Name	B2C-AC101N1-Name	N102	93	AC101N1-Name	X	AN	1/60	Customer ID in back Office	Company Name
B2B-AC101N1-Code-Qualifier	B2C-AC101N1-Code-Qualifier	N103	66	AC101N1-ID-Code-Qualifier	X	ID	1/2	MI = Member ID Number UR = URL for Business	MI
B2B-AC101N1-ID-Code	B2C-AC101N1-ID-Code	N104	67	AC101N1-ID-Code	X	AN	2/80	Member ID Number or URL for Business	Account Number

4.1 Name and Address List

LX – Assignment Number
Purpose: To reference a line number in a transaction set.
NOTE: Will always remain zero as the LX loop is generated only once. (per File/Cust).

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101LX-Assignment-Number	B2C-AC101LX-Assignment-Number	LX01	554	AC101LX-Assignment-Number	M	N0	1/6	Unique Incremented Counter	0

4.1 Name and Address List

IN2 – Individual Name Structure Components - LOOP OF 4
Purpose: To sequence individual name components for maximum specificity. **NOTE:** Set of 4 – Combined (last Name, First Name, and Middle Initial), First Name, Middle Initial, Last Name

#1

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101IN2-Name-Component	B2C-AC101IN2-Name-Component	IN201	1104	AC101IN2-Name-Component	M	ID	2/2	16 = Composite Name	16
B2B-AC101N2-Name	B2C-AC101N2-Name	IN202	93	AC101IN2-Name	M	AN	1/60	Full Name	Company Name

#2

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101N2-Name-Component-02	B2C-AC101N2-Name-Component-02	IN201	1104	AC101IN2-Name2-Component	M	ID	2/2	02 = First Name Component	02
B2B-AC101IN2-Fname	B2C-AC101IN2-Fname	IN202	93	AC101IN2-Fname	M	AN	1/60	First Name	First Name

4.1 Name and Address List

Individual Name Structure Components (continued)

#3

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101N2-Name-Component-03	B2C-AC101N2-Name-Component-03	IN201	1104	AC101IN2-Name3-Component	M	ID	2/2	17 = Middle Initial Names Component	17
B2B-AC101IN2-Mname	B2C-AC101IN2-Mname	IN202	93	AC101IN2-Mname	M	AN	1/60	Full Middle Names Component	M.I.

#4

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101N2-Name-Component-04	B2C-AC101N2-Name-Component-04	IN201	1104	AC101IN2-Name4-Component	M	ID	2/2	05 = Last Name Component	05
B2B-AC101IN2-Lname	B2C-AC101IN2-Lname	IN202	93	AC101IN2-Lname	M	AN	1/60	Last Name	Last Name

4.1 Name and Address List

NX2 – Location ID Component - LOOP 2 for Shipping and Billing
Purpose: To specify physical address of the named party.
NOTE: One for each address line – both Billing and Shipping.

Shipping

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101NX2-Component	B2C-AC101NX2-Component	NX201	1106	AC101NX2-Component	M	ID	2/2	15 = Unstructured Street address 16 = Unstructured City , State, Zip	15
B2B-AC101NX2-Address-Information	B2C-AC101NX2-Address-Information	NX202	166	AC101NX2-Address-Information	M	AN	1/55	Address Line Data	Address
B2B-AC101NX2-County	B2C-AC101NX2-County	NX203	1096	AC101NX2-County	O	ID	5/5	20 = County Designator	N/A

4.1 Name and Address List

NX2 – Location ID Component (continued)

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101NX2-Component-02	B2C-AC101NX2-Component-02	NX201	1106	AC101NX2-Component-02	M	ID	2/2	15 = Unstructured Street address 16 = Unstructured City , State, Zip	16
B2B-AC101NX2-Address-Information-02	B2C-AC101NX2-Address-Information-02	NX202	166	AC101NX2-Address-Information-02	M	AN	1/55	Address Line Data	City, State, Zip
B2B-AC101NX2-County-02	B2C-AC101NX2-County-02	NX203	1096	AC101NX2-County-02	O	ID	5/5	20 = County Designator	N/A

4.1 Name and Address List

NX2 – Location ID Component (continued)

Billing

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101NX2-Component-03	B2C-AC101NX2-Component-03	NX201	1106	AC101NX2-Component3	M	ID	2/2	15 = Unstructured Street address 16 = Unstructured City , State, Zip	15
B2B-AC101NX2-Address-Information-03	B2C-AC101NX2-Address-Information-03	NX202	166	AC101NX2-Address3-Information	M	AN	1/55	Address Line Data	Address
B2B-AC101NX2-County-03	B2C-AC101NX2-County-03	NX203	1096	AC101NX2-County3	O	ID	5/5	20 = County Designator	N/A

4.1 Name and Address List

NX2 – Location ID Component (continued)

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101NX2-Component-04	B2C-AC101NX2-Component-04	NX201	1106	AC101NX2-Component4	M	ID	2/2	15 = Unstructured Street address 16 = Unstructured City , State, Zip	16
B2B-AC101NX2-Address-Information-04	B2C-AC101NX2-Address-Information-04	NX202	166	AC101NX2-Address4-Information	M	AN	1/55	Address Line Data	City, State, Zip
B2B-AC101NX2-County-04	B2C-AC101NX2-County-04	NX203	1096	AC101NX2-County4	O	ID	5/5	20 = County Designator	N/A

4.1 Name and Address List

REF – Reference Numbers
Purpose: To transmit identifying numbers.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101REF-Reference-Number-Qualifier	B2C-AC101REF-Reference-Number-Qualifier	REF01	128	AC101REF-Reference-Number-Qualifier	M	ID	2/3	11 = Account Number	11
B2B-AC101REF-Description	B2C-AC101REF-Description	REF03	352	AC101REF-Description	X	AN	1/80	Description	N/A
B2B-AC101REF-Reference-Identifier	B2C-AC101REF-Reference-Identifier	REF04	C040	AC101REF-Reference-Identifier	O/Z			Allows Composite of REF01, REF02 an additional 2 Times	11 + Account Number

4.1 Name and Address List

SPA – Status of Product or Activity
Purpose: To specify the status of a product or the status of this account.
NOTE: There should only be one of these transactions.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101SPA-Status-Code	B2C-AC101SPA-Status-Code	SPA01	546	AC101SPA-Status-Code	M	ID	2/2	AC = Active 02 = Approved 44 = Terminated 49 = On Probation	Inactive (Y/N)
B2B-AC101SPA-Date-Time-Format-Qualifier	B2C-AC101SPA-Date-Time-Format-Qualifier	SPA02	1250	AC101SPA-Date-Time-Format-Qualifier	X	ID	2/3	DTS = CCYYMMDDHHMM-CCYYMMDD	DTS
B2B-AC101SPA-Date-Time-Period	B2C-AC101SPA-Date-Time-Period	SPA03	1251	AC101SPA-Date-Time-Period	X	AN	1/35	RTS = Single Date Dependent on Status 01 1st Date in String = Date Approved. 44 2nd Date = Date Terminated. 49 1st date will equal Date of membership 2nd Date is end of Probation	As Of Date
B2B-AC101SPA-Amount-Qualifier-Code	B2C-AC101SPA-Amount-Qualifier-Code	SPA04	522	AC101SPA-Amount-Qualifier-Code	X	ID	1/3	T4 = Current Balance	Default = T4

4.1 Name and Address List

SPA – Status of Product or Activity (continued)

B2B-AC101SPA-Monetary-Amount	B2C-AC101SPA-Monetary-Amount	SPA05	782	AC101SPA-Monetary-Amount	X	R	1/18	Account Balance	Opning Balance

4.1 Name and Address List

COM – Communication Contact Information
Purpose: To specify Contact Information for customer. Can also include e-mail addresses.

E-Mail

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101COM-Communication-Qualifier	B2C-AC101COM-Communication-Qualifier	COM01	365	AC101COM-Communication-Qualifier	M	ID	2/2	EM = Email	EM
B2B-AC101COM-Communication-Number	B2C-AC101COM-Communication-Number	COM02	354	AC101COM-Communication-Number	M	AN	1/256	Email Address	Contact E-Mail

Telephone

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101COM-Communication-Qualifier-02	B2C-AC101COM-Communication-Qualifier-02	COM01	365	AC101COM-Communication-Qualifier2	M	ID	2/2	TE = Telephone	TE
B2B-AC101COM-Communication-Number-02	B2C-AC101COM-Communication-Number-02	COM02	354	AC101COM-Communication-Number2	M	AN	1/256	Email Address	Contact / Phone

4.1 Name and Address List

COM – Communication Contact Information (continued)

Fax

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101COM-Communication-Qualifier-03	B2C-AC101COM-Communication-Qualifier-03	COM01	365	AC101COM-Communication-Qualifier3	M	ID	2/2	FX = Fax	FX
B2B-AC101COM-Communication-Number-03	B2C-AC101COM-Communication-Number-03	COM02	354	AC101COM-Communication-Number3	M	AN	1/256	Email Address	Fax

4.1 Name and Address List

SE – Transaction Set Trailer Segment
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments including the beginning (ST) and ending (SE) segments.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101SE-Number-of-Included-Segments	B2C-AC101SE-Number-of-Included-Segments	SE01	96	AC101SE-Number-of-Included-Segments	M	NO	1/10	Number Of Included Segments.	N/A
B2B-AC101SE-Transmission-Set-Control-Number	B2C-AC101SE-Transmission-Set-Control-Number	SE02	329	AC101SE-Transmission-Set-Control-Number	M	AN	9/9	Transaction Set Control. Incremented Counter Starting at 000000001 Zero Padded	N/A

4.1 Name and Address List

GE – Functional Group Trailer Segment
Purpose: To indicate the end of a functional group and to provide control information.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101GE-Number-of-Included-Sets	B2C-AC101GE-Number-of-Included-Sets	GE01	97	AC101GE-Number-of-Included-Sets	M	NO	1/6	1	N/A
B2B-AC101GE-Data-Interchange-Control-Number	B2C-AC101GE-Data-Interchange-Control-Number	GE02	28	AC101GE-Data-Interchange-Control-Number	M/Z	NO	1/9	Sender Supplied - Use GS06 Data 000000001	N/A

4.1 Name and Address List

IEA – Interchange Control Trailer
Purpose: To define the end of an interchange of one or more functional groups and interchange related control segments.

Customer XREF B2B	Customer XREF B2C	Field	Element	Field Name	Req	Type	Size	White Bull Usage	Quick Books
B2B-AC101IEA-Number-of-Included-Groups	B2C-AC101IEA-Number-of-Included-Groups	IEA01	I16	AC101IEA-Number-of-Included-Groups	M	NO	1/5	Sender Supplied Count of number of functional groups Verified by Receiver START 00001	N/A
B2B-AC101IEA-Interchange-Control-Number	B2C-AC101IEA-Interchange-Control-Number	IEA02	I12	AC101IEA-Interchange-Control-Number	M	NO	9/9	Sequential number assigned by sender USE ISA13 DATA START 000000001	N/A

Appendices

A **EDI Transaction Reference**

B **Definitions, Terms and Acronyms**

Appendix A
EDI Transaction Reference

101 Name and Address Lists

This Draft Standard for Trial Use contains the format and establishes the data contents of the Name and Address Lists Transaction Set (101) for use within the context of an Electronic Data Interchange (EDI) environment.

This transaction can be used to facilitate the rental or exchange of name and address mailing lists between direct marketing companies.

180 Return Merchandise Authorization and Notification

This Draft Standard for Trial Use contains the format and establishes the data contents of the Return Merchandise Authorization and Notification Transaction Set (180) for use within the context of an Electronic Data Interchange (EDI) environment.

This transaction set can provide for customary and established business and industry practice relative to the returning of merchandise to the vendor. This transaction set may satisfy request for returns, authorization or disposition of the return, notification of return, or notification of consumer return.

810 Invoice

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

820 Payment Order/Remittance Advice

This Draft Standard for Trial Use contains the format and establishes the data contents of the Payment Order/Remittance Advice Transaction Set (820) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to make a payment, send a remittance advice, or make a payment and send a remittance advice.

This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee, through a financial institution, or through a third party agent.

Appendix A
EDI Transaction Reference

822 Account Analysis

This Draft Standard for Trial Use contains the format and establishes the data contents of the Account Analysis Transaction Set (822) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to transmit detailed balance, service charge and adjustment detail primarily from a bank to its corporate clients. However, this transaction set can also be used between or within corporations.

832 Price/Sales Catalog

This Draft Standard for Trial Use contains the format and establishes the data contents of the Price/Sales Catalog Transaction Set (832) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide for customary and established business and industry practice relative to furnishing or requesting the price of goods or services in the form of a catalog.

838 Trading Partner Profile

This Draft Standard for Trial Use contains the format and establishes the data contents of the Trading Partner Profile Transaction Set (838) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set can be used to request, change, verify or transmit business profile information to or from a trading partner. This information can be used by the receiver to facilitate the processing of the sender's business transactions.

The transaction set may be used to convey government survey information, business classification, general survey information, summary supplier ratings, changes in the EDI environment information, tax information, entity relationships, and general business profile information to update automated information data bases between trading partners.

850 Purchase Order

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide for customary and established business and industry practice relative to the placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

Appendix A
EDI Transaction Reference

855 Purchase Order Acknowledgment

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Acknowledgment Transaction Set (855) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide for customary and established business and industry practice relative to a seller's acknowledgment of a buyer's purchase order. This transaction set can also be used as notification of a vendor generated order. This usage advises a buyer that a vendor has or will ship merchandise as prearranged in their partnership.

860 Purchase Order Change Request - Buyer Initiated

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Change Request - Buyer Initiated Transaction Set (860) for use within the context of an Electronic Data Interchance (EDI) environment.

The transaction set can be used to provide the information required for the customary and established business and industry practice relative to a purchase order change. This transaction can be used: (1) by a buyer to request a change to a previously submitted purchase order or (2) by a buyer to confirm acceptance of a purchase order change initiated by the seller or by mutual agreement of the two parties.

865 Purchase Order Change Acknowledgment/Request - Seller Initiated

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Change Acknowledgment/Request - Seller Initiated Transaction Set (865) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to convey acceptance or rejection of changes to a previously submitted purchase order by the seller or to notify the buyer of changes initiated by the seller to a previously submitted purchase order by the seller.

868 Electronic Form Structure

This Draft Standard for Trial Use contains the format and establishes the data contents of the Electronic Form Structure Transaction Set (868) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide a structure for transfer of EDI standards, or portions thereof in an electronic form. These EDI standards include but are not limited to: ANSI X12 standards, approved ASC-X12 draft standards for trial use, UN/EDIFACT standard messages, and industry EDI conventions and guidelines. It is intended to provide users with the following:

Appendix A
EDI Transaction Reference

868 Electronic Form Structure (continued)

- The ability to send and receive EDI standards data which can be used to update application or translation software.
- The ability to exchange data maintenance information with trading partners about transaction sets, segments, elements and codes that will be used for EDI transmissions.
- The ability to transmit complete or partial EDI standards or conventions.

869 Order Status Inquiry

This Draft Standard for Trial Use contains the format and establishes the data contents of the Order Status Inquiry Transaction Set (869) for use within the context of an Electronic Data Interchange (EDI) environment.

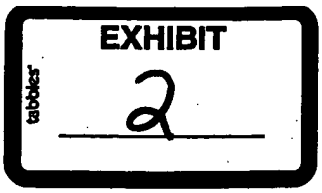
The transaction set can be used to request all pertinent information relative to an entire purchase order, selected line items on a purchase order, or selected products/services on a purchase order. Inquiry can also be made for all or a selected portion of the customer's ordered items, all or a selected portion of the customer's unshipped items, or all or a selected portion of the customer's shipped items.

870 Order Status Report

This Draft Standard for Trial Use contains the format and establishes the data contents of the Order Status Report Transaction Set (870) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to report on the current status of a requirement forecast, an entire purchase order, selected line items on a purchase order, selected products/services on a purchase order, or purchase orders for a specific customer in their entirety or on a selection basis.

The transaction set can also be used to report on the current status of single or multiple requisitions. The report format allows for the inclusion of "reasons" relative to the status. This transaction set may also be used to update the supplier's scheduled shipment or delivery dates. This transaction set can result from either an inquiry or a prearranged schedule agreed to by the trading partners.

Europa Software, Inc.
Legal Correspondence
09/21/2000 thru 04/03/2001



First Email Correspondence 09/21/2000

Date: Thu, 21 Sep 2000 12:33:13 -0700
To: "Shell" <docshell@home.com>
From: "Michael P. Eddy" <meddy@bakermaxham.com>
Subject: Re: White Bull. Salutations and PGP key exchange

Shell,

This is my correct email address here at the office.
I have appended my public key to this message, and
you can also get my public key off the cert server at pgp.com.

My ID is 0x331C6C3C. I have added the IOSystem public
key to my system.

Michael

-----BEGIN PGP SIGNATURE-----
Version: PGPfreeware 6.5.2 for non-commercial use <http://www.pgp.com>

iQA/AwUBOcpieaqZc7IzHGw8EQIzvgCfaZhP2gZ6ScNg6pJt57zWozkox7IAn10S
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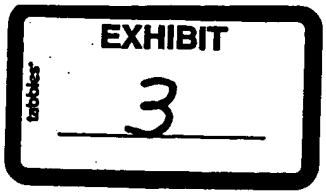


Project Status 12/04/2000

From: "Marcia Armstrong" <arts02@home.com>
To: Larry Maxham <LMaxham@bakermaxham.com>
Date: Mon, 4 Dec 2000 18:06:41 -0800
Subject: Re: Patent Application
CC: arts01@home.com,
meddy@bakermaxham.com,
docshell@home.com

Larry,

Thanks very much for your response . . . we will do our best to relax and look forward to reviewing our first draft on Friday. I would like to arrange a meeting time with Mike so he can provide on overview of what we have and where we are to date.

Mike - my schedule is wide open (at the moment) on Friday. What's most convenient for you?

Shell - are you available?

We greatly appreciate Mike's efforts and your checking in on our progress. Let's stay in touch as needed.

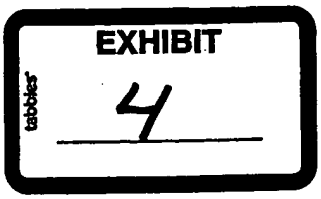
Thank you to and for all.

Marcia

P.S. Copying other team members to keep the communication going to all others concerned.

On 4 Dec 2000, at 17:17, Larry Maxham wrote:

> Dear Marcia:
> Please rest assured that many hours per day are being spent on the
> patent application. The several drawing sheets you sent late last
> Thursday were necessary and important. However, it takes at least a
> couple of days of concentrated effort to assimilate them and write
the
> appropriate description with regard to them. I understand that these
> incorporated information that was discussed in October as being
> necessary. Mike is doing the heavy lifting on the patent application.
> I am involved and will be involved in the final product. What you
> receive on Friday is not likely to be the final product. As for
> additional resources, this is not a matter of building a barn, where
> anyone can lend a hand. This is original creative writing, based on
> the multiple disclosure segments we have received. We are performing
> great efforts to help your company define and establish its important
> property. We look forward to seeing you on Friday. Sincerely, Larry
> Maxham
>
> Lawrence A. Maxham
> Baker & Maxham
> 750 "B" Street #3100
> San Diego, CA 92101
> Phone: 619-233-9004
> Facsimile: 619-544-1246



Meeting Notes 12/13/2000

From: "Marcia Armstrong" <arts02@home.com>
To: meddy@bakermaxham.com,
docshell@home.com
Date: Wed, 13 Dec 2000 22:31:58 -0800
Subject: Europa Software Patent Process
CC: wreavey@arterhadden.com,
arts01@home.com,
lmaxham@bakermaxham.com

Michael and Shell,

Good evening . . .

Providing a quick summary of our meeting today - copying all concerned parties as a matter of courtesy and overall clear communication. This method will continue to be used throughout the process of patent completion. I ask that any inaccuracies in this or future emails be identified immediately for correction. We cannot afford miscommunication or misinformation in our endeavors.

The majority of our time today was devoted to laying out the product documentation provided to date in a form presentable for patent. We were very conscious of streamlining the effort required to complete this endeavor, identified/corrected any duplication of effort and defined specific assignments.

Here are the assignments:

1. All diagrams - to be marked up by Michael, Marcia to modify. Finished diagrams to be provided in a tif format.

Michael - please have ready an initial set of marked up diagrams for pick up at our meeting tomorrow.

2. Technical Process Overview - diagram and narrative to be updated by Marcia.

3. Technical Process Detail

(refer to our Detail_Specs_sec2.7_addendum.doc file dated 11/30/00)

a. Shell to provide overview narrative.

b. Shell to provide broad description of 'Build Business Conversation' block of i.Drive Shell diagram.

c. Database Triggered and Time Triggered Events to be defined by Shell.

d. SDS Inbound and Outbound 'Transaction Routing and Method' to be defined by Shell.

Shell - please provide this information to me no later than 2:00pm tomorrow in preparation for my meeting with Michael.

4. Preferred Embodiment example identifed as the Sales Module; other modules to be referred to as subject to same process. Michael is to begin writing.

5. Baker & Maxham Patent Documentation provided on 12/8/00 is to be reviewed and updated by Marcia and Shell. The use of 'Back Office' terminology has caused the inclusion of many Microsoft references. We will use another term.

Shell - are you available to meet on Monday afternoon?

Michael - please provide a current soft copy of this document on Monday morning in preparation for my meeting with Shell.

In closing this initial status message, Michael confirmed today the information provided in our September 1st meeting. White Bull is a patentable product with several patentable components (i.EDI, i.Drive and SDS).

Michael and I will meet next tomorrow at 5:00pm to provide the information requested and assess progress on the writing of the patent application.

Thanks to all for your continued support and effort/actions to complete this patent application. Please contact me immediately with any additions/changes to these meeting notes.

Feel free to contact me directly if anyone has any questions or would like additional information regarding patent application status.

Marcia

Project Status January 2001

From: "Marcia Armstrong" <arts02@home.com>
To: wreavey@arterhadden.com,
arts01@home.com,
lmaxham@bakermaxham.com,
meddy@bakermaxham.com,
docshell@home.com
Date: Sat, 27 Jan 2001 01:57:08 -0800
Subject: Patent Review Notes

Bill, John, Larry , Michael and Shell,

As directed by the Europa Board, it is critical to keep and distribute information related to our Patent Reviews. In the interest of simplicity and ease, I will be distributing scanned Patent Review notes to keep everyone informed.

Notes for our reviews with Baker & Maxham of January 5th, 23rd, 24th & 26th are attached in an encrypted format. Feel free to contact me if you would like additional information on any topic.

Thank you.

Marcia

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Type: PGP-encrypted

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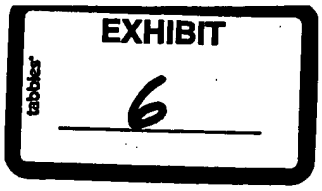

Project Status 02/17/01

From:	Marcia Armstrong <arts02@home.com>
To:	"Michael P. Eddy" <meddy@bakermaxham.com>
Subject:	Patent Documents
Copies to:	Bill Reavey,John Armstrong,Larry Maxham,Shell L. Pierce
Send reply to:	arts02@home.com
Date sent:	Sat, 17 Feb 2001 18:32:43 -0800

Michael,

Thank you for providing the current patent narrative and modified diagrams. Shell is working on polishing the narrative and I on the figures. Goal is to have this pass completed and the patent application ready for Inventors' Review beginning on Wednesday, 02/21/01.

These modified master documents will be handed back to you on Wednesday as well. We would like to meet (in person or phone) on Wednesday morning. Say about 10:00am? Or, please advise your availability.

We plan to have the results of the Inventors' Review to you Monday morning, 02/26. I believe that will begin your 3-day process of preparation for filing.

Thanks to both you and Shell for your effort and actions in working through this patent application process . . . we are very close to having an application to file!

Marcia

On 15 Feb 2001, at 19:05, Michael P. Eddy wrote:

> Shell,
>
> Please find attached the latest update with revisions and numbering
> corrections.
>
> Also, the diagrams have been renumbered and are ready to be picked
> up tomorrow at your convenience. They are at the front desk in an
> envelope with your name on it.
>
> Have a good evening.
>
> Best regards,
>
>
> Michael
>
>
> At 12:44 AM 2/14/2001 -0800, you wrote:
> >Michael and Shell,
> >
> >Patent figures, 42 total, are attached with the most recent
> >changes. Please use these figures as the 'masters' from this point

> >forward.
> >
> >Michael - Shell is planning to pick up your changes to the figures
> >this Friday, as agreed.
> >
> >It appears that each figure will be 84kb. This figure X 42 figures
> >is well within the 10mg limit for electronic filing.
> >
> >Thanks . . .
> >
> >Marcia
> >
> >   ---- File information -----------
> >   File: patent_diagrams_20010213.pdf.pgp
> >   Date: 14 Feb 2001, 0:38
> >   Size: 115740 bytes.
> >   Type: PGP-encrypted

Project Status 03/13/01

From: "Marcia Armstrong" <arts02@home.com>
To: "Michael P. Eddy" <meddy@bakermaxham.com>
Date: Tue, 13 Mar 2001 21:50:23 -0800
Subject: Re: Inventors' Review
CC: wreavey@arterhadden.com, arts01@home.com, lmaxham@bakermaxham.com, docshell@home.com

Michael,

Thanks for the status message. The updated preferred embodiment was sent to you last Wednesday. An additional copy is attached.

Please provide an ETA for completion of the claims. Would you please forward a copy of what's been completed to date? We are anxious to review/understand this part of the claim.

Marcia

On 13 Mar 2001, at 16:14, Michael P. Eddy wrote:

> Marcia,
>
> I am still working on the claims. I had left several bracketed
> comments in the embodiment for you to change or review.
> Have those areas been completed?
>
> If so, I would appreciate it if you could forward the
> final version of the document, and I can do a quick review of your
> changes.
>
> Michael
>
> At 12:41 PM 3/12/2001 -0800, you wrote:
> >Michael,
> >
> >The inventors have completed their review and there are no
> >changes to the preferred embodiment.
> >
> >Please advise the status of the claims at your earliest.
> >
> >Thank you.
> >
> >Marcia
>

---- File information ----------
File: application_ver6b.doc.pgp
Date: 13 Mar 2001, 21:49
Size: 33651 bytes.
Type: PGP-encrypted

Arts Parlor, Inc.
7924 Linen Drive
Santee, CA 92071
619-562-3962

March 27, 2001

By Facsimile (619-544-1246)

Lawrence A. Maxham, Esq.
Baker & Maxham
750 B Street, Suite 3100
San Diego, CA 92101

Dear Larry:

I am writing to advise you that Arts Parlor, Inc. has decided to terminate your firm's representation of Arts Parlor, Inc. with respect to the preparation of a patent application for our electronic commerce software and its three internal components, SDS Filtering, I.Drive Technology and the communications protocol, I.EDI. The process has taken entirely too long. We are concerned that the novelty of our invention is being threatened by the passage of time.

To say the least, we are very disappointed by the situation. Your firm agreed to prepare and file the patent application for a fixed fee of $12,000 dollars. Seven months ago, you stated that the time frame to accomplish this work would be six to eight weeks. As you requested, we have paid you this fee in full, in good faith. As of the date of this letter, the application remains incomplete. All together, only the embodiment for the patent application has been assembled. The claims portion of the application and the application itself remains unwritten. Despite repeated promises of prompt action, your office has made no progress in preparing even a preliminary draft of the claims for our review. To make things worse, our phone calls are not returned and our email messages are ignored.

We are in the process of securing another law firm to complete the patent application. In the meantime, please send our complete files to the following address:

Arts Parlor, Inc.
7924 Linen Drive
Santee, CA 92071
Attn: Mr. John Armstrong

If you prefer, we will arrange to have the files picked up at your office. We need to pick up the files no later than April 2, 2001. If you have any questions, please do not hesitate to give me a call.

Very truly yours,

ARTS PARLOR, INC.

By:_____
John Armstrong

EXHIBIT
tabbies
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Affiliated Office
Geneva, Switzerland

Direct Dial: (216) 696-3340
Internet Address: jgarred@arterhadden.com

April 3, 2001

Mr. J. Edward Armstrong
Mrs. Marcia R. Armstrong
Europa Software, Inc.
7924 Linen Drive
Santee, California 92071

Re: Engagement Letter for Patent Application

Dear Mr. and Mrs. Armstrong:

Bill and I are in receipt of your retainer of $10,000.00 (the "Retainer"). It is a pleasure having the opportunity to represent your legal needs. As we discussed, you have requested that we represent your interests with regard to the preparation of a patent application (the "Patent Application") for your electronic commerce software suite, consisting of three internal components: SDS Filtering, I.Drive Technology and the communications protocol, I. EDI (the "Patent Application Engagement"). We are pleased to have this opportunity to assist you, and this letter will acquaint you with our proposed manner of handling this representation. This letter pertains only to the Patent Application, not other matters.

1. **Firm Representation:** It is the Firm that will represent you, but we will be primarily responsible for handling the matters on which we will be working on your behalf. Other lawyers in the Firm will work with you from time to time in the event that we are unavailable or because another lawyer is better suited to handle a particular aspect of a legal matter due to a special expertise he or she possesses in the area relating to that matter. However, Bill and I will be your primary contacts.

2. **Services:** As addressed, we envision that our initial representation will comprise U.S. utility patent applications and/or provisional applications, licensing work, trademark work and general counseling of your intellectual property concerns. We render our invoices monthly, and bill at our standard hourly rates. We have agreed that the attorneys' fees incurred in getting the Patent Application on file will be less than $10,000. The exact cost of our services is hard to predict at this time.

3. **Keeping You Informed:** We will keep you informed of the status of each matter as developments occur. This will include sending you copies of all agreements, correspondence and documents that we prepare, as well as copies of important letters and other documents which we may receive from others. Usually, you will have to take no action upon receipt of this information, but you should read it to be aware of what is taking place. We suggest that you maintain a file in which to keep copies of the items we send you.

4. **Messages:** There will be times when we will be unavailable to speak with you immediately on the telephone. However, we will make every effort to return your phone calls promptly. Please feel free to leave a message on my PhoneMail (216-696-3340). Please feel free to speak openly to my secretary, Vanessa Byers at (216-696-5587), and ask her questions or give her the information which you have. This will enable us to be most efficient in handling your calls and your legal matters.

5. **Fees:** Our goal is to provide timely, practical and cost-effective solutions to help Client achieve your objectives in the Patent Application Engagement. The services of our attorneys and paralegals will be billed on an hourly basis. We will control your legal expenses by having tasks handled by professionals with different billing rates based upon their area and level of experience as required by the demands of each individual task. The fee structure at our offices ranges from $200 to $450 per hour for lawyers, and is subject to annual upward adjustments. My present hourly rate is $290. I will be responsible for managing and handling the Patent Application Engagement on your behalf as your principal contact at the Firm. Bill Reavey's hourly rate is $300. Bill will assist me on an as-needed basis. I will also be assisted by Tim Manning, whose billing rate is $225 per hour.

Payment for expenses is due upon receipt of an invoice from this office. The term "expenses" will include charges for messenger service and overnight delivery service, long distance telephone calls, document reproduction, computer legal research, secretarial overtime, and word processing, among other things. When a substantial expense outlay is anticipated, we will ask you for an advance payment which will be placed into our trust account for the payment of the anticipated expense. Otherwise, we will advance minor expenses on your behalf and, thereafter, seek reimbursement from you.

We will bill you on a monthly basis, and our billing cycle is at the end of each month. This will enable us to deliver the invoice just after the 15th day of the next month. For accounting purposes, our bills will be sent to you at the above address.

Simple interest at the rate of 10% per annum or the lawful limit in California, whichever is lower, will accrue on any past due balance. A balance is "past due" if not paid within 30 days of the invoice date. You agree to pay our invoices promptly. And, if our bills remain unpaid and

an alternative payment arrangement cannot be agreed upon within a reasonable period of time, we reserve the right to refuse to render future services or to withdraw from this Engagement.

As noted above, you have already paid the Retainer. We will apply this Retainer to our future bills. If this is a litigation matter, we will bill you an amount sufficient to replenish the Retainer on a monthly basis.

6. **Termination:** At all times you have the right to terminate our services upon written notice to that effect. We similarly have the right at all times to terminate our services upon written notice to that effect in the event that you either fail to cooperate with us in any reasonable request, to timely pay the monthly statements in full as submitted, or if we determine in our reasonable discretion that to continue our services to you would be unethical or impractical.

Please read this letter carefully and, assuming this is your understanding of the terms and conditions of our representation, please sign and date one copy of this letter and return it to me as soon as possible.

Again, thank you for engaging Arter & Hadden and we look forward to working with you.

Very truly yours,

ARTER & HADDEN LLP

John X. Garred

William A. Reavey

JXG:WAR:vjb
Enclosure

AGREED TO AND ACCEPTED BY:
This ____ day of April 2001

EUROPA SOFTWARE, INC.

By:_____
J. Edward Armstrong
Chief Executive Officer